LAER and MSBACT Draft Proposals

BACT Scientific Review Committee Meeting

April 4, 2017

1. LAER Part B, Section 1 – SCAQMD LAER
    a. Furnace, Heat Treating
    b. Food Oven, Bakery
    c. Food Oven, Tortilla Chip
    d. Food Oven, Snack Food
    e. Flare, Biogas
    f. Flare, Landfill Gas

2. LAER, Part B, Section 2- Other Districts
    a. Printing, Flexographic
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3. Part B, Section 3 – Other Technologies
    a. I.C. Engine, Compression Ignition, PM Trap, SCR
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4. Part D - Minor Source BACT
    a. Printing, Graphic Arts
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Part B, Section 1 – SCAQMD LAER

Section I: SCAQMD BACT Determinations

Application No.: 560283 & 560285

Equipment Category – Metal Heating Furnace

1. EQUIPMENT INFORMATION			
		DATE:	9/15/2016
A. MANUFACTURER:	Custom Built	B. MODEL:	Aluminum
C. DESCRIPTION:	Aluminum Forging Furnace		
D. FUNCTION:	Furnace heats aluminum billets prior and during the forging process		
E. SIZE/DIMENSIONS/CAPACITY:	32'-9" x 11'-10.5" x 6'-2.5"	F. MAXIMUM HEAT INPUT:	5,000,000 btu/hr
G. BURNER INFORMATION:	NO.: 1	TYPE:	Eclipse Winnox, M/N 500
H. PRIMARY FUEL:	Natural Gas	I. OTHER FUEL:	N/A
J. OPERATING SCHEDULE:	24 HRS/DAY	7 DAYS/WK	52 WKS/YR

2. COMPANY INFORMATION			
A. COMPANY:	Carlton Forge Works	B. NAICS CODE:	33211
C. ADDRESS:	7743 E. Adams Street		
CITY:	Paramount	STATE: CA	ZIP: 90723
D. CONTACT PERSON:	Armando Bautista		
E. PHONE NO.:	562 633-1131	F. EMAIL:	abautista@cfworks.com

3. PERMIT INFORMATION			
A. AGENCY:	SCAQMD	B. APPLICATION TYPE:	modification
C. SCAQMD ENGINEER:	Monica Fernandez-Neild		
D. PERMIT TO CONSTRUCT/OPERATE INFORMATION:		P/C ISSUANCE DATE:	5/27/2014
	P/O NO.: G42717,8	P/O ISSUANCE DATE:	9/9/16
E. START-UP DATE:	August 2014		

4. EMISSION INFORMATION	
A. PERMIT	
A1. BACT EMISSION LIMITS AND AVERAGING TIMES:	NOx, Natural Gas with Low NOx burner 50 ppmvd @3% O2dry
A2. OTHER BACT REQUIREMENTS:	SOx and Inorganics, Natural Gas
A3. BASIS OF THE BACT/LAER DETERMINATION:	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.
B. CONTROL TECHNOLOGY	
B1. MANUFACTURER/SUPPLIER:	Eclipse Winnox
B2. DESCRIPTION:	Low NOx Burner

4. EMISSION INFORMATION

B3. CONTROL EQUIPMENT PERMIT APPLICATION DATA: APPLICATION NO.: 560283,5 P/C ISSUANCE DATE: 5/27/2014
P/O NO.: G42717,8 P/O ISSUANCE DATE: 9/9/2016

B4. REQUIRED CONTROL EFFICIENCIES (%):

COLLECTION: CONTROL DEVICE: OVERALL:

C. DEMONSTRATION OF COMPLIANCE

C1. COMPLIANCE DEMONSTRATED BY: Source Test Report

C2. SOURCE TEST/PERFORMANCE DATA RESULTS AND ANALYSIS:

DATE OF SOURCE TEST: 10-5&19, 2014 COLLECTION EFFICIENCY:

CONTROL DEVICE EFFICIENCY: OVERALL EFFICIENCY:

SOURCE TEST/PERFORMANCE DATA:

OPERATING CONDITIONS:

TEST METHODS: SCAQMD Method 100.1

5. COMMENTS

NOx < 10 ppmvd @ 3% O2 for both furnaces, and CO <143 ppmvd @ 3% O2 (CO was measured well below 20% of full scale and was increase to 20% of scale or 40 ppmvd and corrected to 3% O2)

Section 1, SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **440544**

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	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	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
OVEN 1 UNKNOWN "LOW NOX"	1.6 MMBtu/hr	2
OVEN 1B	5.4 MMBtu/hr	1
OVEN 5 – BAKER PERKINS		42
OVEN 6 – FLYNN NO. 156HN		24
CAT OX – MAXON OVENPACK 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: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: OPERATING TEMP LESS THAN 500OF	

2. COMPANY INFORMATION

A. COMPANY: Galasso's Bakery	B. FAC ID: 72351
C. ADDRESS: 10820 San Sevaine Way CITY: Mira Loma STATE: CA ZIP: 91752	D. NAICS CODE: 311812
E. CONTACT PERSON: Brian Workman	F. TITLE: Chief Engineer
G. PHONE NO.: (951) 360-1211	H. EMAIL: bworkman@galassos.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: OTHER
C. SCAQMD ENGINEER: Vicky Lee	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: G43113, G43117, F83743, F83744, G32643 PO ISSUANCE DATE: 10/6/2016	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: > 10 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	CAT OX: 95% OVERALL CONTROL EFFICIENCY (MASS BASIS)	OVENS: 40 PPM CAT OX: COMPLIANCE WITH RULE 1147		OVENS: 800 PPMV (COMPLIANCE WITH RULE 1153.1)		
Averaging Time	CAT OX: 1 HR	OVENS:15 MIN		OVENS: COMPLIANCE WITH RULE 1153.1		
Correction		OVENS: 3% O2		OVENS: COMPLIANCE WITH RULE 1153.1		

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: Click here to enter a date.
PO NO.: G32643 PO ISSUANCE DATE: 10/6/2016

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	95%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Inlet temp catalyst bed 600°F.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: Cat Ox (VOC) March 8, 2011. Ovens (NOx): April 8, 2016, June 9, 2006, 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: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR11031, 06151A-B, 14410
G. SCAQMD SOURCE SPECIFIC RULES: 1153, 1153.1		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section 1, SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **551284**

Equipment Category: **Food Oven**

Equipment Subcategory: **Tortilla Chip Oven**

Date: **March 8, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Casa Herrera	B. MODEL: C1 120-28 RGX (E)
C. DESCRIPTION: Natural gas-fired food oven to dry and bake tortilla chips.	
D. FUNCTION: Food oven equipped with IR burners to dry masa and ribbon burners to bake masa into tortilla chips prior to cooking in a deep fat fryer.	
E. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 5.774 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
CASA HERRERA ENSIGN RIBBON	4.032 MMBtu/hr	Number of burners
IR IET COMB. ULTRA GLO 7D-400P	1.742 MMBtu/hr	

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52	
K. EQUIPMENT COST:	
L. EQUIPMENT INFORMATION COMMENTS: RECLAIM Device ID D85. The facility also operates an identical line under D86, Appl. No. 551289, which has identical emission limits.	

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

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: Click to choose an item.
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: 3/17/2014	
F. OPERATIONAL TIME: 3 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit		54 PPMV		2000 PPMV		
Averaging Time		1 HOUR		15 MIN		
Correction		@ 3% O_2		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 TECHNOLOGY

A. MANUFACTURER: Manufacturer of the equipment	B. MODEL: Model name and number

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

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

6. DEMONSTRATION OF COMPLIANCE

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 >560ºF. Oven Temps: Top: 302ºF, Middle:470ºF, Lower: 299ºF

G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
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.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000264	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 50
D. RECLAIM FAC? YES ☒ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR14386
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Section 1, SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **499293**

Equipment Category: **Food Oven**

Equipment Subcategory: **Snack Food**

Date: **March 8, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Maxon	B. MODEL: C1 120-28 RGX (E)
C. DESCRIPTION: Natural gas-fired food oven to bake corn meal cheese puffs	
D. FUNCTION: Food oven equipped with 1.6 MMBtu/hr burner to bake Frito Lay cheese puffs. The combustion air is recirculated in the oven with a 0.5 HP blower to distribute the heat before exhausting to atmosphere.	
E. SIZE/DIMENSIONS/CAPACITY: Cheese Puff production line capable of frying or baking cheese puffs. Oven is conveyorized and equipped with one Maxon low NOx burner.	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 1.6 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
MAXON CYCLOMAX	1.6 MMBtu/hr	1
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 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

3. PERMIT INFORMATION

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: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit		25 PPMV		75 PPMV		
Averaging Time		1 HOUR		1 HOUR		
Correction		@ 3% O_2		@ 3% O_2		

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 TECHNOLOGY

A. MANUFACTURER: Manufacturer of the equipment	B. MODEL: Model name and number

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

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Method 100.1 Source Test

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 298ºF. 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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000255	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 50
D. RECLAIM FAC? YES ☒ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR09058
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a 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 17, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: John Zink	B. MODEL: Zink Ultra Low Emission (ZULE)
C. DESCRIPTION: 39.3 MMBtu/hr enclosed flare, digester gas fired with natural gas pilots	
D. FUNCTION: Flare incinerates digester gas vented from food waste and manure anaerobic digesters. Natural gas (or propane) pilot.	
E. SIZE/DIMENSIONS/CAPACITY: 7'D. x 40' H., 39.3 MMBtu/hr, 32.4 MMBtu/hr permitted limit	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 39.3 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
ZULE	13.1 MMBtu/hr	3
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: DIGESTER GAS	I. OTHER FUEL: NAT GAS/PROPANE
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

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: slee@ieua.org

3. PERMIT INFORMATION

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: 7 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	5.5 lb/day	0.025 lb/MMBtu 19.4 lb/day	1.4 lb/hr	0.06 lb/MMBtu 46.6 lb/hr	14.2 lb PM10/hr	
Averaging Time	1 HR	1 HR		1 HR	1 HR	
Correction						

B. OTHER BACT REQUIREMENTS: Maximum 32.4 MMBtu/hr scfm digester gas (Condition 7). 1500^{o}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: Enter any additional comments regarding Emissions Information.

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

6. DEMONSTRATION OF COMPLIANCE

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

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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: 50	C. APPLICATION TYPE CODE: 10
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR03440
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: 2.36x10-7	H2. MICR DATE: 11/12/13	H3. CANCER BURDEN: <0.5	H4. CB DATE: 11/12/13
H5: HIA: <1.0	H6. HIA DATE: 11/12/13	H7. HIC: <1.0	H8. HIC DATE: 11/12/13

Section 1, SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **513835**

Equipment Category: **Flare**

Equipment Subcategory: **Digester Gas**

Date: **March 15, 2017**

1. EQUIPMENT INFORMATION

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	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
NIT MESH	12 MMBtu/hr	1
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: DIGESTER GAS	I. OTHER FUEL: NATURAL GAS
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

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: 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

3. PERMIT INFORMATION

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: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.038 lb/MMBtu	0.025 lb/MMBtu		0.06 lb/MMBtu		
Averaging Time	60 min	90 min		90 MIN		
Correction	(as CH_4)					

B. OTHER BACT REQUIREMENTS: Maximum 333 scfm digester gas (Condition 11). 1600^{o}F Min temp (Condition 7). Performance tests every five years (Condition 18)

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: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

6. DEMONSTRATION OF COMPLIANCE

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., 0.02 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
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: 50	C. APPLICATION TYPE CODE: 10
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: 6.55 x10-9	H2. MICR DATE: 6/19/13	H3. CANCER BURDEN: <0.5	H4. CB DATE: 6/19/13
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a 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**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: John Zink	B. MODEL: Zink Ultra Low Emission (ZULE)
C. DESCRIPTION: 120 MMBtu/hr maximum input to enclosed flare s, digester gas fired with propane pilot	
D. FUNCTION: Flare incinerates landfill gas vented from landfill gas collection system. Flare is part of a two flare system. Propane gas pilot.	
E. SIZE/DIMENSIONS/CAPACITY: 12'D. x 50' H., 120 MMBtu/hr, 4000 SCFM digester gas permitted limit	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 120 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
ZULE	120 MMBtu/hr	1
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: LANDFILL GAS	I. OTHER FUEL: PROPANE GAS
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

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: deanmj@repsrv.com

3. PERMIT INFORMATION

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: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	1.33 lb/hr	0.025 lb/MMBtu 2.4 lb/hr	2.5 lb/hr	0.06 lb/MMBtu 7.2 lb/hr	1.4 lb PM10/hr	
Averaging Time	1 HR	1 HR		1 HR	1 HR	
Correction	(as CH_4)					

B. OTHER BACT REQUIREMENTS: Maximum 4000 scfm digester gas (Condition 8). 1400^{o}F Min temp (Condition 5). Annual performance tests (Condition 12). Per source test PM10 as PM.

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: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	98%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

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

6. DEMONSTRATION OF COMPLIANCE

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 digester 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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: 50	C. APPLICATION TYPE CODE: 10
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR09359
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

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**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Simoneau	B. MODEL: FX2-35
C. DESCRIPTION: 39.9 MMBtu watertube boiler with low NOx burner and SCR unit with anhydrous ammonia	
D. FUNCTION: Boilers provides steam for laundry facilities, hospital heating and sterilization procedures.	
E. SIZE/DIMENSIONS/CAPACITY: Boiler No. 2	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 39.9 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
WEBSTER	39.9 MMBtu/hr	1

H. PRIMARY FUEL: NATURAL GAS	FUEL OIL
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52	
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines	
L. EQUIPMENT INFORMATION COMMENTS: THREE IDENTICAL BOILERS AND SCR WITH IDENTICAL LIMITS. ADD' PERMIT NO. BOILER 1 G36227, BOILER 3 G36229, SCR 1 G36231, SCR 3 G36234	

2. COMPANY INFORMATION

A. COMPANY: US GOVT, VET. AFFAIRS MED CTR (LONG BEACH)	B. FAC ID: 13990
C. ADDRESS: 5901 E. 7th 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: E-mail address of contact person

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Roy Olivares	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a 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: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit		5 ppmvd		100 ppmvd		5 ppmvd NH3 slip
Averaging 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. Anhydrous ammonia, 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: Click here to enter a 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 EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
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.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test PR16435

B. DATE(S) OF SOURCE TEST: October 12, 2016

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 011204	B. CCAT: 81	C. APPLICATION TYPE CODE: 10
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☒ NO ☐	F. SOURCE TEST ID(S): PR16435
G. SCAQMD SOURCE SPECIFIC RULES: 1146		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part B, Section I: SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **546360**

Equipment Category: **I.C. Engine, Stationary, Non-Emergency, Electrical Generators**

Equipment Subcategory: _____

Date: **April 4, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Cooper Bessmer	B. 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	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: Digester and/or natural gas	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Engine is equipped with an exhaust heat recovery steam generator, 5,008,500 Btu/hr capacity.	

2. COMPANY INFORMATION

A. COMPANY: Orange County Sanitation District	B. FAC ID: 017301
C. ADDRESS: 10844 Ellis Avenue CITY: Fountain Valley STATE: CA ZIP: 92708	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Terry Ahn	F. TITLE: Regulatory Specialist
G. PHONE NO.: 714-593-7082	H. EMAIL: tahn@ocsd.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: Click to choose an item. PERMIT TO OPERATE
C. SCAQMD ENGINEER: Name of engineer processing the application	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: G45189 PO ISSUANCE DATE: 3/3/2017	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: Enter the approximate amount of time, in days or months that the equipment has been operating. The minimum demonstration time is six months for LAER, and one year for Minor Source BACT	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM_{10}	INORGANIC
BACT Limit	30 PPM	11 PPM		250 PPM	RULE 404	
Averaging Time	Measured as Carbon	15 min		15 min		
Correction	15% O_2	15% O_2		15% O_2		

B. OTHER BACT REQUIREMENTS: Compliance with emission requirements of Rule 1110.2(d)(1)(C)

C. BASIS OF THE BACT/LAER DETERMINATION: Click to select one of the types of BACT determinations. Case Specific is less stringent than the most recent BACT determination for that equipment category. Case Specific and Other should be accompanied by additional comments in the Comments section.

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

5. CONTROL TECHNOLOGY

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: Click here to enter a 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 EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

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

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test conducted when equipment was under Rule 441 Permit to Construct (A/N 497717) and CEMS data.

B. DATE(S) OF SOURCE TEST: April 7 & 8, 2010

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

LAER and MSBACT Draft Proposals

BACT Scientific Review Committee Meeting

April 4, 2017

Part B, Section 2 – Other Districts

Part B, Section II: SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **N-3309-16-0**

Equipment Category: **Printing (Graphic Arts)**

Equipment Subcategory: **Flexographic**

Date: **May 17, 2004**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Gallus	B. MODEL: EM280
C. DESCRIPTION: 11-unit web fed flexographic printing press	
D. FUNCTION: Facility prints on paper, metal and metalized paper -wine labels, and similar items such as letterhead and billing forms.	
E. SIZE/DIMENSIONS/CAPACITY: 10 units for colored inks and one unit for coating. 200 ft/min, 13 HP.	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: ---	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Press will utilize Ultraviolet (UV) inks and UV coatings that will be applied to paper, metal and metalized paper.	

2. COMPANY INFORMATION

A. COMPANY: G3 Enterprises	B. FAC ID: ---
C. ADDRESS: 2612 Crows Landing Road CITY: Modesto STATE: CA ZIP: 95358	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Christopher Savage	F. TITLE: Representative
G. PHONE NO.: 209-341-7402	H. EMAIL: ---

3. PERMIT INFORMATION

A. AGENCY: SJVAPCD	B. APPLICATION TYPE: Click to choose an item. PERMIT TO OPERATE
C. SCAQMD ENGINEER: James Harader	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 5/17/04 P/O NO.: 1040401 PO ISSUANCE DATE: 5/17/2004	
E. START-UP DATE: 5/17/20047	
F. OPERATIONAL TIME: 12+ years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	---	---	---	---	---	---
Averaging Time	---	---	---	---	---	---
Correction	---	---	---	---	---	---

B. OTHER BACT REQUIREMENTS: Compliance with emission requirements of Rule 1110.2(d)(1)(C)

C. BASIS OF THE BACT/LAER DETERMINATION: Click to select one of the types of BACT determinations. Case Specific is less stringent than the most recent BACT determination for that equipment category. Case Specific and Other should be accompanied by additional comments in the Comments section.

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

5. CONTROL TECHNOLOGY

A. MANUFACTURER: UV inks (Inx International) and coatings (Inx International)	B. MODEL:

C. DESCRIPTION: Use of UV coatings up to 8% by weight VOC and use of UV inks up to 1% by weight VOC.

D. SIZE/DIMENSIONS/CAPACITY: Ink usage 32,631 gal/yr (89.4 gal/day, 0.1 lb/gal VOC), Coating usage 12,629 gal/yr (34.6 gal/day, 1.0 lb/gal VOC), all maximum proposed usage.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE:

F. REQUIRED CONTROL EFFICIENCIES: Enter comments for additional information regarding Control Technology.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Use of UV coatings up to 8% by weight VOC and use of UV inks up to 1% by weight VOC

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test or other method that was used to demonstrate compliance

B. DATE(S) OF SOURCE TEST: An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions.

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

G. TEST METHODS (SPECIFY AGENCY): Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).
H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part B, Section II: SCAQMD BACT Determination

Source Type: **Major/LAER**

Application No.: **012563**

Equipment Category: **Fiberglass Operations – Application Hand and Spray Lay up**

Equipment Subcategory:

Date: **September 27, 2006**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Custom	B. MODEL: EM280
C. DESCRIPTION: Spray Booth	
D. FUNCTION: Facility uses spray booth to apply polyester resin gel coat for manufacture of fiberglass cultured marble products.	
E. SIZE/DIMENSIONS/CAPACITY: Total solvent usage for clean up is 1200 gals/year (Acetone); Polyester gel coat resin usage is 1300 gals/year.	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: ---	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: 5 HRS/DAY 5 DAYS/WEEK 50 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

2. COMPANY INFORMATION

A. COMPANY: Concept Cultured Marble	B. FAC ID: ---
C. ADDRESS: 3520 Depot Road, Suite K CITY: Hayward STATE: CA ZIP: 94545	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Allen Vargas	F. TITLE: President
G. PHONE NO.: 510-783-0675	H. EMAIL: ---

3. PERMIT INFORMATION

A. AGENCY: BAAQMD	B. APPLICATION TYPE: Click to choose an item. PERMIT TO OPERATE
C. SCAQMD ENGINEER: Sanjeev Kamboj (BAAQMD Engineer)	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 9/27/05 P/O NO.: Click here to enter text PO ISSUANCE DATE: 9/27/2005	
E. START-UP DATE: 9/2/2005	
F. OPERATIONAL TIME: 11+ years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	---	---	---	---	---	---
Averaging Time	---	---	---	---	---	---
Correction	---	---	---	---	---	---

B. OTHER BACT REQUIREMENTS: Compliance with BAAQMD Rule 50, use of polyester resin material with a monomer content of no greater than 34% by weight and use of aqueous emulsion cleaner or acetone for clean-up to maximum extent possible.

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

4. EMISSION INFORMATION

D. EMISSION INFORMATION COMMENTS: **Unsaturated polyester resin**: 10,000 gal/yr, 1.2 spec. gravity, 33% monomer content, POC emission factor of 11% (wt.)[FRP model Permit Handbook Chapter 11.12] = **3,632.9 lb/yr**; **LV40 marble clear gel coat**: 1,300 gal/yr, 1.07 spec. gravity, 35% styrene monomer content, POC emission factor of 53% (wt.)[FRP model Permit Handbook Chapter 11.12] = **2,151.97 lb/yr**; **Acetone cleanup solvent**: 1,200 gal/yr, 6.58 lb/gal VOC = **7,896 lb/yr**.

5. CONTROL TECHNOLOGY

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

C. DESCRIPTION: Use of unsaturated polyester resin, SIL90BA-585 with 33% styrene monomer content; LV40 Marble clear gel coat, 5794Cf UV inks up to 1% by weight VOC, Acetone for cleanup solvent, 6.58 lb/gal VOC content.

D. SIZE/DIMENSIONS/CAPACITY: ---

E. CONTROL EQUIPMENT PERMIT INFORMATION:

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

F. REQUIRED CONTROL EFFICIENCIES: Enter comments for additional information regarding Control Technology.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Compliance with BAAQMD Rule 50, use of polyester resin material with a monomer content of no greater than 34% by weight and use of aqueous emulsion cleaner or acetone for clean-up to maximum extent possible. Enter comments for additional information regarding Control Technology.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: The addition of control equipment was determined not to be cost effective. Compliance with BAAQMD Rule 50, use of polyester resin material with a monomer content of no greater than 34% by weight and use of aqueous emulsion cleaner or acetone for clean-up to maximum extent possible.

B. DATE(S) OF SOURCE TEST: An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions.

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.
G. TEST METHODS (SPECIFY AGENCY): Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).
H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

LAER and MSBACT Draft Proposals

BACT Scientific Review Committee Meeting

April 4, 2017

Part B, Section 3 – Other Technologies

Part B, Section III: Other Technologies

Source Type: **Major/LAER**

Application No.: **567735**

Equipment Category: **I.C. Engine, Stationary, Emergency, Electrical Generators**

Equipment Subcategory: _____

Date: **December 11, 2016**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Cummins	B. MODEL: QST30-G5
C. DESCRIPTION: Compression Ignition, diesel engine, 12 cylinders, turbocharged and aftercooled with integrated aftertreatment system.	
D. FUNCTION: On-site emergency electrical power generation.	
E. SIZE/DIMENSIONS/CAPACITY: 1490 BHP, driving 1000 kW generator	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: DIESEL	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: <1 HRS/DAY 1 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Engine is equipped with an aftertreatment system consisting of Selective Catalytic Reduction and Diesel Particulate Filter.	

2. COMPANY INFORMATION

A. COMPANY: Praxair, Inc.	B. FAC ID: 007416
C. ADDRESS: 2300 E. Pacific Coast Highway CITY: Wilmington STATE: CA ZIP: 90744	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Laura Cremer	F. TITLE: Environmental Specialist
G. PHONE NO.: 925-866-6851	H. EMAIL: laura_cremer@praxair.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION PERMIT TO OPERATE
C. SCAQMD ENGINEER: Tracy Nguyen	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 6/16/15 P/O NO.: G43499 PO ISSUANCE DATE: 10/27/2016	
E. START-UP DATE: 10/1/2015	
F. OPERATIONAL TIME: Intermittent--for engine readiness test. Limited to 200 hrs/year which includes no more than 50 hours/year and 4.2 hour/month for maintenance and testing.	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.19 GR/BHP-HR	0.5 GR/BHP-HR		2.6 GR/BHP-HR	0.02 GR/BHP-HR	
Averaging Time	Measured as Carbon	15 min		15 min		
Correction	15% O_2	15% O_2		15% O_2		

B. OTHER BACT REQUIREMENTS: Compliance with rules 404, 431.2 and 1470.

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

D. EMISSION INFORMATION COMMENTS: Engine was certified to comply with EPA Tier 4 requirements.

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Cummins	B. MODEL: S4F-H-T4F

C. DESCRIPTION: Selective Catalytic Reduction and Diesel Particulate Filter with an electric heater.

D. SIZE/DIMENSIONS/CAPACITY: 85% DPF efficiency.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 567735 PC ISSUANCE DATE: 6/16/15
PO NO.: G43499 PO ISSUANCE DATE: 10/27/2016

F. REQUIRED CONTROL EFFICIENCIES: Enter comments for additional information regarding Control Technology.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	85%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Engine is certified to comply with EPA Tier 4 requirements: NMHC=0.14 g/bhp-hr, NOx=0.5 g/bhp-hr, CO=2.61 g/bhp-hr and PM=0.022 g/bhp-hr.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Engine is certified to comply with EPA Tier 4 requirements.

B. DATE(S) OF SOURCE TEST: An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions.

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

G. TEST METHODS (SPECIFY AGENCY): Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).
H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part B, Section III: Other Technologies

Source Type: **Minor**

Application No.: **591787**

Equipment Category: **Fuel Cell Electricity Generator – Digester Gas fueled**

Equipment Subcategory: _____

Date: **March 1, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Fuel Cell Energy	B. MODEL: DFC 1500
C. DESCRIPTION: Fuel Cell, digester gas fueled with biogas clean-up system.	
D. FUNCTION: On-site electrical power generation and heat recovery.	
E. SIZE/DIMENSIONS/CAPACITY: 1.4 MW, 355 scfm Digester gas flow	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: DIGESTER GAS	I. OTHER FUEL: NATURAL GAS
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Biogas clean-up system consists of condensate drain tank, hydrogen sulfide removal vessel, siloxane removal vessels, polishing vessel and refrigerant chiller.	

2. COMPANY INFORMATION

A. COMPANY: Riverside Fuel Cell, LLC	B. FAC ID: 181483
C. ADDRESS: 5950 Acorn Street CITY: Riverside STATE: CA ZIP: 92504	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Don Bell	F. TITLE: Field Service Manager
G. PHONE NO.: 203-648-3658	H. EMAIL: dbell@fce.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION PERMIT TO OPERATE
C. SCAQMD ENGINEER: Gaurang Rawal	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 2/25/17 P/O NO.: G45213 PO ISSUANCE DATE: 3/1/2017	
E. START-UP DATE: 10/1/2015	
F. OPERATIONAL TIME: Fuel cell is operational 24 hour/day, 365 days/year.	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.10 LBS/MW-HR	0.07 LBS/MW-HR		0.10 LBS/MW-HR		
Averaging Time	Measured as Carbon	15 min		15 min		
Correction	15% O_2	15% O_2		15% O_2		

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: ---	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 EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS ---

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: December 20, 2016

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

G. TEST METHODS (SPECIFY AGENCY): Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).
H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

LAER and MSBACT Draft Proposals

BACT Scientific Review Committee Meeting

April 4, 2017

Part D – Minor Source BACT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

DRAFT

10-20-2000 Rev. 0
12-5-2003 Rev. 1
7-14-2006 Rev 2
X-XX-2017 Rev 3

Equipment or Process: Printing (Graphic Arts)

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Flexographic	Inks with ≤ 1.5 Lbs VOC/Gal, Less Water and Less Exempt Compounds (1990); or UV/EB or water-based inks, and use of super compliant cleaning solvents. Compliance with SCAQMD Rules 1130 and 1171 (~~12~~X-~~5~~X-~~2003~~2017)					
Control	For add-on control required by SCAQMD Rule 1130(c)(5) or other District requirement: EPA M. 204 Permanent Total Enclosure (100% collection) vented to RTO with 95% overall control efficiency; Combustion Chamber: Temp ≥ 1500°F, Retention Time > 0.3 seconds (X-X-2017)	Compliance with SCAQMD Rule 1147 (X-X-2017)				
Letterpress	Compliance with SCAQMD Rules 1130 and 1171 (12-5-2003)					
Lithographic or Offset, Heatset	Low VOC Fountain Solution (≤ 8% by Vol. VOC); Low Vapor Pressure (≤ 10 mm Hg VOC Composite Partial Pressure[1]) or Low VOC (≤ 100 g/l) Blanket and Roller Washes; Oil-Based or UV-Curable Inks; and Compliance with SCAQMD Rules 1130 and 1171 (7-14-2006)				~~Oven Venting to an Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400 °F; 95% Overall Efficiency) (10-20-2000)~~	

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

	Criteria Pollutants					
Subcategory	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Control	Oven Venting to an Afterburner (≥ 0.3 Sec. Retention Time at ≥ ~~1400~~ 1595^{0}F; ~~95~~99% Overall Efficiency) (X-X-2017)	Compliance with SCAQMD Rule 1147 (X-X-2017)				
(Continued on next page)						
Lithographic or Offset, Non-Heatset	Same As Above					
Rotogravure or Gravure—Publication and Packaging	Compliance with SCAQMD Rules 1130 and 1171 (10-20-2000)					
Screen Printing and Drying	Compliance with SCAQMD Rules 1130.1 and 1171 (12-5-2003); or UV/EB or water-based inks, and use of super compliant cleaning solvents. (X-X-2017). ~~(12-5-2003)~~					

(Continued on Next Page)

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

1) VOC COMPOSITE PARTIAL PRESSURE is the sum of the partial pressures of the compounds defined as VOCs. VOC Composite Partial Pressure is calculated as follows:

$$PPc = \sum_{i=1}^{n} \frac{\frac{(Wi)(VPi)}{MWi}}{\frac{Ww}{MWw} + \frac{We}{MWe} + \sum_{i=1}^{n} \frac{Wi}{MWi}}$$

Where:

PPc	=	VOC composite partial pressure at 20°C in mm Hg
Wi	=	Weight of the "i"th VOC compound in grams
MWi	=	Molecular weight of "i"th VOC compound in grams per gram-mole
VPi	=	Vapor pressure of the "i"th VOC compound at 20°C in mm Hg
Ww	=	Weight of water in grams
MWw	=	Molecular weight of water in grams per gram-mole
We	=	Weight of exempt compound in grams
MWe	=	Molecular weight of exempt compound in grams per gram-mole

For multiple exempt compounds: $We / MWe = \sum_{j=1}^{n} Wej / MWej$

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **548341**

Equipment Category: **Flexographic Printing Press**

Equipment Subcategory: **w/ Regenerative Thermal Oxidizer**

Date: **March 28, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Hot Jin Ironworks	B. MODEL: HJ-222
C. DESCRIPTION: Flexographic Printing Press 4 color. Demonstrates compliance with Rule 1130(c)(1) through provisions of 1130(c)(5).	
D. FUNCTION: Printing of food packaging	
E. SIZE/DIMENSIONS/CAPACITY: Two identical presses contained in enclosure. Second press operating under Appl. 548337	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: Press electric heater; RTO 1.35 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
MAXON KINEDIZER	1.35 MMBtu/hr	1
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 5 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

2. COMPANY INFORMATION

A. COMPANY: Asia Plastics	B. FAC ID: 103149
C. ADDRESS: 9347 Rush St. CITY: S. El Monte STATE: CA ZIP: 91733	D. NAICS CODE: 32311
E. CONTACT PERSON: Kent Ung	F. TITLE: President
G. PHONE NO.: 626-448-8100	H. EMAIL: asiaplasticsinc@yahoo.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Farah Milner	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 7/10/13 P/O NO.: G43434 PO ISSUANCE DATE: 10/21/2016	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: 12/9/2013 source test date. > 3 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	Overall Control Efficiency 95%	RTO: Compliance with SCAQMD Rule 1147				
Averaging Time	1 HR	30 MIN				
Correction	Mass basis	@ 3% O_2				

B. OTHER BACT REQUIREMENTS: Method 204 Permanent Total Enclosure, Combustion Chamber Temperature ≥ 1500ºF, Chamber Retention Time ≥0.3 seconds, chamber temperature interlock system

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

D. EMISSION INFORMATION COMMENTS: Flexographic press has an electric heater

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Ship and Shore	B. MODEL: SSE-3K-95X-RTO

C. DESCRIPTION: RTO to vent and combust VOC emissions from a flexographic printing press

D. SIZE/DIMENSIONS/CAPACITY: 1.35 MMBtu/hr natural gas fired with two ceramic heat exchanger beds

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 548337 PC ISSUANCE DATE: 7/10/13
PO NO.: G43432 PO ISSUANCE DATE: 10/21/2016

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	95%	95%	100%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS NOx emissions in compliance with SCAQMD Rule 1147

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: December 9, 2013

C. COLLECTION EFFICIENCY METHOD: EPA Method 204

D. COLLECTION EFFICIENCY PARAMETERS: PTE Static Pressure ≤ 0.01" H2O

E. SOURCE TEST/PERFORMANCE DATA: VOC: Inlet 1.5 lb C1/hr, Exhaust 0.075 lb C/hr, Exhaust 0.081 lb VOC/hr. NOx: Startup 0.064 lb NOx/hr, Normal 0.026 lb NOx/hr

F. TEST OPERATING PARAMETERS AND CONDITIONS: RTO Startup Burner at 99.9%, Burner during normal operation 52-66%; Oxidizer inlet 2730 acfm; oxidizer exh 3680 acfm; Press 1 1100 ft/hr; Press 2 7000 ft/hr

G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.1, 25.3, 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Rule 1130 minimum requirement is 70% overall control, equipment permitted at 95% overall control

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000276	B. CCAT: 12	C. APPLICATION TYPE CODE: 10
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **515931**

Equipment Category: **Heatset Lithographic Printing Press**

Equipment Subcategory: **w/ Regenerative Thermal Oxidizer**

Date: **March 28, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Beiren	B. MODEL: 3845
C. DESCRIPTION: Heatset lithographic press with two Megtec 3.2 MMBtu/hr ovens vented to a 1.2 MMBtu/hr Adwest RTO.	
D. FUNCTION: Printing of newspaper inserts	
E. SIZE/DIMENSIONS/CAPACITY: Press: 8 color 38" wide, RTO two ceramic heat exchangers and a 40 HP exhaust blower	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: Press: 6.4 MMBtu/hr; RTO 1.2 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
MAXON CYCLOMAX	1.6 MMBtu/hr	4
MAXON KINEMAX	1.2 MMBtu/hr	1

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

2. COMPANY INFORMATION

A. COMPANY: Freedom Communications	B. FAC ID: 81797
C. ADDRESS: 1701 S. Lewis CITY: Anaheim STATE: CA ZIP: 92801	D. NAICS CODE: 511110
E. CONTACT PERSON: Greg Engler	F. TITLE: Pressroom Mgr
G. PHONE NO.: 714-953-7882	H. EMAIL: E-mail address of contact person

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Emmanuel Quizon	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: G17024 PO ISSUANCE DATE: 3/6/2012	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: 11/8/2007 source test date. > 9 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM_{10}	INORGANIC
BACT Limit	Overall Control Efficiency 99%	Ovens:30 ppmv RTO: Compliance with SCAQMD Rule 1147				
Averaging Time	1 HR	30 MIN				
Correction	Mass basis	All @ 3% O_2				

B. OTHER BACT REQUIREMENTS: Method 204 Permanent Total Enclosure, Combustion Chamber Temperature ≥ 1595°F, Chamber Retention Time ≥0.3 seconds, chamber temperature interlock system. Control efficiency only applies to ink usage (permitted condition)

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: Adwest	B. MODEL: RETOX 4.0 RTO95

C. DESCRIPTION: RTO vents and combust VOC emissions from a lithographic printing press

D. SIZE/DIMENSIONS/CAPACITY: 1.20 MMBtu/hr natural gas fired with two ceramic heat exchanger beds

E. CONTROL EQUIPMENT PERMIT INFORMATION:
APPLICATION NO. 460266 PC ISSUANCE DATE: Click here to enter a date.
PO NO.: F99092 PO ISSUANCE DATE: 9/18/2008

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	99%	99.5%	99.5%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS NOx emissions in compliance with SCAQMD Rule 1147. 99.5% collection efficiency aasigned based on 1997 SCAQMD Compliance Advisory. 99% overall control efficiency chosen by applicant.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test

B. DATE(S) OF SOURCE TEST: December 9, 2013

C. COLLECTION EFFICIENCY METHOD: Smoke Test

D. COLLECTION EFFICIENCY PARAMETERS: 99.5% collection efficiency assigned based on SCAQMD Permitting policy. Smoke test was conducted to verify collection of process air. Collection efficiency only applies to ink usage (permitted condition)

E. SOURCE TEST/PERFORMANCE DATA: Oven 19.8ppmvd NOx @3% O2. VOC 99.77% Dest. Eff, 99.27% overall eff.

F. TEST OPERATING PARAMETERS AND CONDITIONS:

G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.1, 25.3, 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000272	B. CCAT: 12	C. APPLICATION TYPE CODE: 10
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

DRAFT

10-20-2000 Rev. 0

Equipment or Process: Dryer or Oven

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
Carpet Oven		80 ppmvd, corrected to 3% O_2 (10-20-2000)	Natural Gas (1990)		Natural Gas (1990)	
Rotary, Spray and Flash Dryers[1)]		Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (1990)		Natural Gas with Baghouse (1990)	
Tray, Agitated Pan, and Rotary Vacuum Dryers		Natural Gas with Low NOx Burner (10-20-2000)	Natural Gas (1990)		Natural Gas (1990)	
Tenter Frame Fabric Dryer		60 ppmvd Corrected to 3% O_2 (10-20-2000)	Natural Gas (10-20-2000)		Natural Gas (10-20-2000)	
Other Dryers and Ovens – Direct and Indirect Fired[2]		30 ppmvd corrected to 3% O_2 (04-10-98)	Natural Gas (10-20-2000)		Natural Gas (10-20-2000)	

1. Dryers for foodstuff, pharmaceuticals, aggregate & chemicals.
~~1.~~2. Does not include food or bakery ovens. See listing for "Food Oven."

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

DRAFT

X-X-2017 Rev. 0

Equipment or Process: Food Oven

		Criteria Pollutants					
Subcategory[1]	**Rating/ Size**	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Ribbon Burner	> 500°F		60 ppmvd @ 3% O_2 (X-X-2017)	Natural Gas (X-X-2017)	SCAQMD Rule 407 (X-X-2017)	Natural Gas (X-X-2017)	
	≤ 500°F		30 ppmvd @ 3% O_2 (X-X-2017)	Same as above	Same as above	Same as above	
Direct Fired Burner			30 ppmvd @ 3% O_2 (X-X-2017) *[15 ppmvd @ 3% O_2 TBD]*		*[100 ppmvd @ 3% O_2 TBD]*		
Infrared			30 ppmvd @ 3% O_2 (X-X-2017)				
Add-on Control for Bakery Oven with yeast, ≥ 25 lb VOC/day		Catalytic oxidizer with 95% overall control efficiency (mass basis); catalyst inlet temperature ≥ 600°F; ceramic prefilter (X-X-2017)	30 ppmvd @ 3% O_2 (X-X-2017)				

(Continued on next page)

[1]Indirect Fired units may be subject to Rules 1146 and 1146.1 and BACT for Process Heater

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

		Criteria Pollutants					
Subcategory	**Rating/ Size**	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
Meat and Other Products		Compliance with SCAQMD Rules and Regulations					

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **548863**

Equipment Category: **Food Oven**

Equipment Subcategory: **Ribbon Burner ≤ 500ºF**

Date: **March 24, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: International Multifood	B. MODEL: 1400
C. DESCRIPTION: Griddle Type oven with ribbon burners	
D. FUNCTION: Food oven with griddle type trays used to bake English muffins	
E. SIZE/DIMENSIONS/CAPACITY: 6’ W X 70’L x 5’-4”H	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 2.59 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
FLYNN MODEL 122HN SERIES 856	Rated heat input of single burner, in btu/hr	63
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: PERMITTED LIMIT OF < 49 LB VOC/DAY	

2. COMPANY INFORMATION

A. COMPANY: Aryzta, LLC	B. FAC ID: 173864
C. ADDRESS: 1220 S. Baker St. CITY: Ontario STATE: CA ZIP: 91761	D. NAICS CODE: 311812
E. CONTACT PERSON: Michael Wu	F. TITLE: Asst Dir. of Engineering
G. PHONE NO.: 714-256-6900	H. EMAIL: michael.wu@aryzta.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: OTHER
C. SCAQMD ENGINEER: Tracy Nguyen	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 9/4/13 P/O NO.: G26836 PO ISSUANCE DATE: 9/4/2013	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: > 5years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM_{10}	INORGANIC
BACT Limit		30 ppmvd	Natural Gas		Natural Gas	
Averaging Time		1 HR				
Correction		3% O2				

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS .

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Tests R12019 and R11208

B. DATE(S) OF SOURCE TEST: 3/9/2011 and 11/9/2011

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: CO2 equivalency used due to high O2 content, highest zone concentration 27.76 ppmvd NOx @3%O2.

F. TEST OPERATING PARAMETERS AND CONDITIONS: Test conducted during “normal operations.”

G. TEST METHODS (SPECIFY AGENCY): SCAQMD M. 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000255	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 40
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): R12019, R11208
G. SCAQMD SOURCE SPECIFIC RULES: 1153, 1153.1		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **475618**

Equipment Category: **Food Oven**

Equipment Subcategory: **Ribbon Burner > 500ºF**

Date: **March 24, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Tecnomaiz	B. MODEL: T-1200 NG
C. DESCRIPTION: Corn Tortilla Oven No. 1	
D. FUNCTION: Food oven with ribbon type burners used to bake corn tortillas	
E. SIZE/DIMENSIONS/CAPACITY: 20'-7" L X 7'-4" W X 6'-9"H	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 2.7 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
RIBBON	0.079 MMBtu/hr	34
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information	

2. COMPANY INFORMATION

A. COMPANY: Mission Foods	B. FAC ID: 153640
C. ADDRESS: 14200 Arminta St. CITY: Panorama City STATE: CA ZIP: 91402	D. NAICS CODE: 31183
E. CONTACT PERSON: Kelli Kimberly	F. TITLE: Environmental Director
G. PHONE NO.: 909-980-3566	H. EMAIL: kelli_kimberly@missionfoods.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Hassan Namaki	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 1/1/10 P/O NO.: G19902 PO ISSUANCE DATE: 8/16/2012	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: > 5years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM_{10}	INORGANIC
BACT Limit		30 ppmvd	Natural Gas	Compliance with SCAQMD Rule 407	Natural Gas	
Averaging Time		1 HR				
Correction		3% O2				

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Tests PR10242

B. DATE(S) OF SOURCE TEST: 1/12/2012

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: 2 zones, Highest zone concentration 52.6 ppmvd NOx, 915 ppmvd CO both at 3%O2.

F. TEST OPERATING PARAMETERS AND CONDITIONS: Test conducted during “normal load,” 89.1% firing rate

G. TEST METHODS (SPECIFY AGENCY): SCAQMD M. 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000264	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 40
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): PR10242
G. SCAQMD SOURCE SPECIFIC RULES: 1153, 1153.1		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **487295**

Equipment Category: **Food Oven**

Equipment Subcategory: **Direct Fired**

Date: **March 24, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Werner Ppfleiderer	B. MODEL: 1F62837/1
C. DESCRIPTION: Two zone 48" wide oven	
D. FUNCTION: Food oven with low NOx burners used to bake almond cookies	
E. SIZE/DIMENSIONS/CAPACITY: 20'-7" L X 7'-4" W X 6'-9"H	

COMBUSTION SOURCES

F. MAXIMUM HEAT INPUT: 2.4 MMBtu/hr

G. BURNER INFORMATION

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
LOW NOX	1.2 MMBtu/hr	2
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels

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

K. EQUIPMENT COST: TBD

L. EQUIPMENT INFORMATION COMMENTS: TEMP RANGE 500-560^{O}F

2. COMPANY INFORMATION

A. COMPANY: JSL Foods Inc.	B. FAC ID: 136986
C. ADDRESS: 2222 ½ Davie Ave. CITY: Los Angeles STATE: CA ZIP: 90040	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Gregorio Torres	F. TITLE: Plant Mgr
G. PHONE NO.: 323-797-9999	H. EMAIL: gtorres@jslfoods.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: PO NO PC
C. SCAQMD ENGINEER: Kim Le	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: G5819 PO ISSUANCE DATE: 1/1/2010	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: > 7 years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections ($\%O_2$, $\%CO_2$, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit		30 ppmvd	Natural Gas	Compliance with SCAQMD Rule 407	Natural Gas	
Averaging Time		1 HR				
Correction		3% O2				

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: Click here to enter text. PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Tests PR10302

B. DATE(S) OF SOURCE TEST: 10/22/2010

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: 2 zones, Highest zone concentration 22.3 ppmvd NOx, 111 ppmvd CO both at 3%O2.

F. TEST OPERATING PARAMETERS AND CONDITIONS: Test conducted during normal load.

G. TEST METHODS (SPECIFY AGENCY): SCAQMD M. 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000255	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 30
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): PR10302
G. SCAQMD SOURCE SPECIFIC RULES: 1153, 1153.1		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **396227**

Equipment Category: **Food Oven**

Equipment Subcategory: **Direct Fired**

Date: **March 28, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: APV	B. MODEL: Model name and number
C. DESCRIPTION: Tunnel/Conveyor type oven with 6 Low NOx burners	
D. FUNCTION: Baking of cookies	
E. SIZE/DIMENSIONS/CAPACITY: 6'W x 10.5'H x 280'L	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 6.4 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
MAXON CYCLOMAX	Rated heat input of single burner, in btu/hr	6
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: **TO BE FURTHER EVALUATED**	

2. COMPANY INFORMATION

A. COMPANY: Laguna Cookie Company	B. FAC ID: 127838
C. ADDRESS: 4041 W. Garry Ave. CITY: Santa Ana STATE: CA ZIP: 92704	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Scott Stauffer	F. TITLE: Senior Vice President
G. PHONE NO.: 714-546-6855	H. EMAIL: E-mail address of contact person

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Name of engineer processing the application	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: F49119 PO ISSUANCE DATE: 2/16/2002	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: Enter the approximate amount of time, in days or months that the equipment has been operating. The minimum demonstration time is six months for LAER, and one year for Minor Source BACT	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM_{10}	INORGANIC
BACT Limit		15 ppmvd		100 ppmvd		
Averaging Time		TBD		TBD		
Correction		@ 3% O_2		@ 3% O_2		

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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

D. EMISSION INFORMATION COMMENTS: EMISSIONS TO BE FURTHER EVALUATED

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Manufacturer of the equipment	B. MODEL: Model name and number

C. DESCRIPTION: Additional description of the operation and functions of the control equipment.

D. SIZE/DIMENSIONS/CAPACITY: An appropriate size parameter such as rated heat input, usable volume, rated filter efficiency, and/or one more characteristic dimensions.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. Click here to enter text. PC ISSUANCE DATE: Click here to enter a date.
PO NO.: PO ISSUANCE DATE: Click here to enter a date.

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Manufacturer's Guarantee (7 to 1 turndown)

B. DATE(S) OF SOURCE TEST: An appropriate size parameter such as rated product throughput, usable volume, and/or one more characteristic dimensions.

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: Enter source test results for each criteria contaminant or precursor (mass emissions, concentrations or efficiencies) if they differ from the requirements previously listed. As previously requested in Section 4, identify any corrections or averaging times

F. TEST OPERATING PARAMETERS AND CONDITIONS:

G. TEST METHODS (SPECIFY AGENCY): Identify the primary source test methods used and identify the agency (e.g., CARB Method 425).

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000255	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 10	
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): Click here to enter text.	
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.			
H. HEALTH RISK FOR PERMIT UNIT			
H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **567948**

Equipment Category: **Food Oven**

Equipment Subcategory: **Infrared burners**

Date: **March 24, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Custom	B. MODEL: Model name and number
C. DESCRIPTION: Food oven with only infrared burners vented to a catalytic oxidizer to control VOC emissions	
D. FUNCTION: Food oven equipped with infrared burners used to bake pita and other flat breads	
E. SIZE/DIMENSIONS/CAPACITY: 7' W x 19' L x 11'H with a 0.5 HP combustion blower	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 2.198 MMBtu/hr	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner	Rated heat input of single burner, in btu/hr	314
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: UNCONTROLLED (INLET) VOC EMISSIONS 1.038 LB/HR (PERMIT EVALUATION) IS EQUAL TO 24.9 LB VOC/DAY. PERMIT LIMITS TO 1440 TON BAKERY PROD/MONTH AND 0.7752% YEAST	

2. COMPANY INFORMATION

A. COMPANY: Rich Products Corporation	B. FAC ID: 178261
C. ADDRESS: 3401 W. Segerstrom Ave. CITY: Santa Ana STATE: CA ZIP: 92704	D. NAICS CODE: 311812
E. CONTACT PERSON: Jim Niemeyer	F. TITLE: Maintenance Manager
G. PHONE NO.: 714-559-6826	H. EMAIL: jniemeyer@rich.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: MODIFICATION
C. SCAQMD ENGINEER: Tracy Nguyen	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: G43298 PO ISSUANCE DATE: 10/14/2016	
E. START-UP DATE: 10/14/2014	
F. OPERATIONAL TIME: > 1 year (10/14/14 source test date)	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOX	SOX	CO	PM OR PM_{10}	INORGANIC
BACT Limit	95% BY WEIGHT OVERALL CONTROL	Oven: 30 ppm CatOx: 30 ppm	Nat Gas	Rule 407	Nat Gas	
Averaging Time	1 HR	1 HR				
Correction	TGNMO as CH4	Oven: 3%O2 Cat Ox: 3%O2				

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: Western Combustion	B. MODEL: 30

C. DESCRIPTION: Catalytic oxidizer with low NOx burner venting Oven No. 2 and control VOC emission released by yeast in baking products

D. SIZE/DIMENSIONS/CAPACITY: Maxon Oven Pak LE13 burner, 1.3 MMBTu/hr burner. 4 Pt catalyst Modules.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 569302 PC ISSUANCE DATE: Change ownership
PO NO.: G43249 PO ISSUANCE DATE: 10/12/2016

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	95%	95%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS Permitted limit minimum 600ºF catalyst inlet temperature. 100% collection efficiency required to meet efficiency limits.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test

B. DATE(S) OF SOURCE TEST: 10/14-16/2014

C. COLLECTION EFFICIENCY METHOD: EPA M.204

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: 98.4% destruction eff, Inlet VOC to Cat Ox 2.4 lb/hr, Exh VOC 0.03 lb/hr. Exhaust of cat ox: Normal load NOx with production 22.1 ppmvd @ 3%O2 (0.05 lb NOx/hr) and 21.2 ppmvd CO @ 3%O2 (0.14 lb CO/hr)

F. TEST OPERATING PARAMETERS AND CONDITIONS: Cat Bed inlet Temp 650ºF.

G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.1, 25.3, 100.1

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000255	B. CCAT: 06	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): PR14211
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D, SCAQMD BACT Determination

Source Type: **Minor**

Application No.: **548869**

Equipment Category: **Food Ovens**

Equipment Subcategory: **Ribbon Burners with CatOx**

Date: **March 24, 2017**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Baking Technology (2 identical ovens)	B. MODEL: Baketech Maxisaver Bun Oven
C. DESCRIPTION: Two identical food ovens vented to a 2.7 MMBtu/hr Catalytic Oxidizer	
D. FUNCTION: Two food oven with ribbon burners used to bake buns	
E. SIZE/DIMENSIONS/CAPACITY: 33'-0" L X 48'-4" W X 11'-0"H	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: 7.3 MMBtu/hr each oven	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
FLYNN 1622HN	Rated heat input of single burner, in btu/hr	24 each oven
MAXON MPAKT EB4	2.7 MMBtu/hr	1 Cat Ox

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: TBD	
L. EQUIPMENT INFORMATION COMMENTS: TEMP RANGE < 500^{O}F	

2. COMPANY INFORMATION

A. COMPANY: Aryzta, LLC	B. FAC ID: 173864
C. ADDRESS: 1220 S. Baker St. CITY: Ontario STATE: CA ZIP: 91761	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Michael Wu	F. TITLE: Asst. Dir. of Engineering
G. PHONE NO.: 714-256-6900	H. EMAIL: michael.wu@aryzta.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: OTHER
C. SCAQMD ENGINEER: Marilyn Potter	
D. PERMIT INFORMATION: PC ISSUANCE DATE: Click here to enter a date. P/O NO.: G14787 PO ISSUANCE DATE: 9/13/2013	
E. START-UP DATE: Select date from pull down. The start-up date is the first date that the equipment operates for any reason. Use the best estimate at the PC stage and actual date at the PO stage.	
F. OPERATIONAL TIME: > 9 years. Prev. operated under Fresh Start Bakeries	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	95% overall control (mass basis)	30 ppmvd (both ovens and Catalytic Oxidizer)	Natural Gas	Compliance with SCAQMD Rule 407	Natural Gas	
Averaging Time	1 HR	1 HR				
Correction		3% O2				

B. OTHER BACT REQUIREMENTS: Concise description of the BACT requirements for each regulated contaminant from the equipment, other than the requirements list in Section 4(A).

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: CSM Worldwide	B. MODEL: 180A

C. DESCRIPTION: Catalytic oxidizer used to control VOC emissions vented from two bun ovens

D. SIZE/DIMENSIONS/CAPACITY: 25 Catalyst module with 2.7 MMBtu/hr

E. CONTROL EQUIPMENT PERMIT INFORMATION:
APPLICATION NO. 548869 PC ISSUANCE DATE: Click here to enter a date.
PO NO.: G27030 PO ISSUANCE DATE: 9/13/2016

F. REQUIRED CONTROL EFFICIENCIES: Minimum efficiencies of the system control equipment as required by permit, or the most stringent rule requirement. The control or destruction efficiency is determined across the control device (e.g. inlet-outlet). Collection or capture efficiency is based at each point of contaminant collection in the system. Enter each contaminant that applies. Add rows as needed.

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	95%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS. Minimum catalyst inlet temperature 600ºF

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test PR07086

B. DATE(S) OF SOURCE TEST: 4/3/2011 NOx cat ox burner (Appl file 518219), VOC control 9/20/2007

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: 96.6% overall VOC control eff. Highest concentration 28.2 ppmvd NOx @ 3% O2

F. TEST OPERATING PARAMETERS AND CONDITIONS: Test conducted during normal load.

G. TEST METHODS (SPECIFY AGENCY): SCAQMD M. 100.1, 25.1, 25.3

H. MONITORING AND TESTING REQUIREMENTS: Include any monitoring or testing requirements and their frequency that will be enforced to maintain emission levels reported for the BACT Determination.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000255	B. CCAT: 16	C. APPLICATION TYPE CODE: 30
D. RECLAIM FAC? YES ☐ NO ☒	E. TITLE V FAC: YES ☐ NO ☒	F. SOURCE TEST ID(S): PR07086
G. SCAQMD SOURCE SPECIFIC RULES: 1153, 1153.1		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

DRAFT

~~10-20-2000 Rev. 0~~
~~7-9-2004 Rev. 1~~
~~12-3-2004 Rev. 2~~

~~Equipment or Process:~~ ~~I.C. Engine, Stationary, Non-Emergency~~

	~~Criteria Pollutants~~					
~~Subcategory/ Rating/Size~~	~~VOC~~	~~NOx~~	~~SOx~~	~~CO~~	~~PM_{10}~~	~~Inorganic~~
~~< 2064 bhp~~	~~0.15 grams/bhp-hr (4-10-98)~~	~~0.15 grams/bhp-hr (4-10-98)~~	~~See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000)~~	~~0.60 grams/bhp-hr (4-10-98)~~	~~See Clean Fuels Policy in Part C of the BACT Guidelines (10-20-2000) Compliance with Rule 1470. (12-3-2004)~~	
~~≥ 2064 bhp~~	~~25 ppm @ 15% O_2 (7-9-2004)~~	~~9 ppmvd @ 15% O_2 (7-9-2004)~~	~~Same as Above (10-20-2000)~~	~~33 ppmvd @ 15% O_2 (5-8-98)~~	~~Same as Above (7-9-2004)~~	~~Ammonia: 10 ppmvd @ 15% O_2 (7-9-2004)~~
~~Landfill or Digester Gas Fired~~	~~0.8 grams/bhp-hr (4-10-98)~~	~~0.60 grams/bhp-hr (4-10-98)~~	~~Compliance with Rule 431.1 (10-20-2000)~~	~~2.5 grams/bhp-hr (4-10-98)~~		

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

DRAFT

12-02-2016 Rev. 0

Equipment or Process: - I.C. Engine, Stationary, Non-Emergency, Non-Electrical Generators [1]

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
> 50 bhp	Compliance with SCAQMD Rule 1110.2 (12-02-2016)	Compliance with SCAQMD Rule 1110.2 (12-02-2016)	See Clean Fuels Policy in Part C of the BACT Guidelines (12-02-2016)	Compliance with SCAQMD Rule 1110.2 (12-02-2016)	See Clean Fuels Policy in Part C of the BACT Guidelines (12-02-2016) Compliance with Rule 1470 (12-02-2016)	
Landfill or Digester Gas Fired[2]	Compliance with SCAQMD Rule 1110.2 ~~0.8 grams/bhp-hr~~ (12-02-2016)	Compliance with SCAQMD Rule 1110.2 ~~0.60 grams/bhp-hr~~ (12-02-2016)	Compliance with SCAQMD Rule 431.1 (12-02-2016)	Compliance with SCAQMD Rule 1110.2~~2.5 grams/bhp-hr~~ (12-02-2016)		

~~1) This BACT listing was adapted from the "I.C. Engine, Stationary, Non-Emergency." An additional listing for "I.C. Engine, Stationary, Non-Emergency, Electrical Generators," is currently under development. Until the amendment is developed, Stationary, Non-Emergency, Electrical Generators will be subject to "I.C. Engine, Stationary, Non-Emergency."~~

~~2)~~1) For the adoption of this new listing, the requirements for this subcategory were transferred directly from the existing requirements under "I.C. Engine, Stationary, Non-Emergency." The requirements are not new, but the date listed was updated to reflect the date of adoption of the new listing.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

DRAFT

X-X-2017 Rev. 0

Equipment or Process: I.C. Engine, Stationary, Non-Emergency, Electrical Generators [1]

	Criteria Pollutants					
Subcategory/ Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM10**	**Inorganic**
> 50 bhp	Compliance with SCAQMD Rule 1110.2 (X-X-2017)	Compliance with SCAQMD Rule 1110.2 (X-X-2017)	See Clean Fuels Policy in Part C of the BACT Guidelines (X-X-2017)	Compliance with SCAQMD Rule 1110.2 (X-X-2017)	See Clean Fuels Policy in Part C of the BACT Guidelines (X-X-2017) Compliance with Rule 1470 (X-X-2017)	
Landfill or Digester Gas Fired	Compliance with SCAQMD Rule 1110.2 (X-X-2017)	Compliance with SCAQMD Rule 1110.2 (X-X-2017)	Compliance with SCAQMD Rule 431.1 (12-02-2016)	Compliance with SCAQMD Rule 1110.2 (X-X-2017)		

1) This BACT listing was adapted from the previous "I.C. Engine, Stationary, Non-Emergency," Part D BACT listing.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

Part D: NonSCAQMD BACT Determination

Source Type: **Minor**

Application No.: **533039**

Equipment Category: **I.C. Engine, Stationary, Non-Emergency, Electrical Generators**

Equipment Subcategory: _____

Date: **April 26, 2012**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: GM/Tecogen	B. MODEL: TECODRIVE 7400
C. DESCRIPTION: Spark Ignition, Rich Burn, Four-Cycle, 8 cylinders.	
D. FUNCTION: On-site electrical power generation	
E. SIZE/DIMENSIONS/CAPACITY: 108 HP, driving 75 KW generator	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Engine is equipped with emission control consisting of non-selective catalytic converter.	

2. COMPANY INFORMATION

A. COMPANY: Lake Forest II Master Assoc.	B. FAC ID: 170558
C. ADDRESS: 24752 Toledo Way CITY: Lake Forest STATE: CA ZIP: 92630	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: JoAnn Burrows	F. TITLE: General Manager
G. PHONE NO.: 949-586-0860	H. EMAIL: jburrows@lf2.org

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: PO NO PC
C. SCAQMD ENGINEER: Chingli Lin	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 4/26/12 P/O NO.: G17651 PO ISSUANCE DATE: 4/26/2012	
E. START-UP DATE: 1/29/2013	
F. OPERATIONAL TIME: 4+ years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.1 LB/MW-HR	0.07 LB/MW-HR		0.2 LB/MW-HR	RULE 404	
Averaging Time	Measured as Carbon	15 min		15 min		
Correction	15% O_2	15% O_2		15% O_2		

B. OTHER BACT REQUIREMENTS: Compliance with emission requirements of Rule 1110.2(d)(1)(L)

C. BASIS OF THE BACT/LAER DETERMINATION: Compliance with Rule 1110.2(d)(1)(L) and achieved in practiceOther (add comment)

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

5. CONTROL TECHNOLOGY

A. MANUFACTURER: SUD-CHEMIE NSCR	B. MODEL: ENVICAT 7319

C. DESCRIPTION: Non-Selective Catalytic Converter with automatic air/fuel ratio controller, Tecogen, model Teconet Stoichiometric AFRC.

D. SIZE/DIMENSIONS/CAPACITY: ---

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 533039 PC ISSUANCE DATE: 4/26/12
PO NO.: G17651 PO ISSUANCE DATE: 4/26/2012

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

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS two stage system with three way catalyst followed by air injection and additional catalyst. Manages air/fuel ratio slightly rich of stoichiometric via oxygen sensors located before and after the first stage three way catalyst.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test.

B. DATE(S) OF SOURCE TEST: January 29, 2013

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: NOx = 0.027 lb/MWe-hr, CO = 0.067 lb/MWe-hr, VOC = 0.04 lb/MWe-hr.

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D: NonSCAQMD BACT Determination

Source Type: **Minor**

Application No.: **558442**

Equipment Category: **I.C. Engine, Stationary, Non-Emergency, Electrical Generators**

Equipment Subcategory: _____

Date: **June 17, 2016**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: GE Jenbacher	B. MODEL: JMS416b86
C. DESCRIPTION: Spark Ignition, Lean Burn, Four-Cycle, 16 cylinder, Turbocharged and Aftercooled.	
D. FUNCTION: On-site electrical power generation	
E. SIZE/DIMENSIONS/CAPACITY: 1573 HP, driving 1 MW generator	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Engine is equipped with emission control consisting of selective catalytic reduction and oxidation catalyst.	

2. COMPANY INFORMATION

A. COMPANY: Palm Springs City (Municipal)	B. FAC ID: 42218
C. ADDRESS: 205 North El Cielo Road CITY: Palm Springs STATE: CA ZIP: 92262	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Patrick Sweeney	F. TITLE: Facilities Manager
G. PHONE NO.: 760-323-8170	H. EMAIL: Patrick.sweeney@palmspringsca.gov

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION PERMIT TO OPERATE
C. SCAQMD ENGINEER: David Hauck	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 8/14/14 P/O NO.: G40720 PO ISSUANCE DATE: 6/172016	
E. START-UP DATE: 11/18/2015	
F. OPERATIONAL TIME: 1+ years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.17 LB/MW-HR	0.12 LB/MW-HR		0.34 LB/MW-HR	RULE 404	
Averaging Time	Measured as Carbon	15 min		15 min		
Correction	15% O_2	15% O_2		15% O_2		

B. OTHER BACT REQUIREMENTS: Compliance with emission requirements of Rule 1110.2(d)(1)(L)

C. BASIS OF THE BACT/LAER DETERMINATION: Compliance with Rule 1110.2(d)(1)(L) and achieved in practice Other (add comment)

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

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Miratech	B. MODEL: EM35.120-20

C. DESCRIPTION: Selective Catalytic Reduction with urea injector and 1000 gal. tank. Catalytic Oxidizer, Miratech, Model SP-ZCS-42X41-18/20-XA3B1

D. SIZE/DIMENSIONS/CAPACITY: SCR honeycomb bed, 2 layers of catalyst, 17 cu.ft. volume. CatOx 3 layers of catalyst, 2.01 cu.ft. volume.

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 558443 PC ISSUANCE DATE: 8/14/14
PO NO.: G40721 PO ISSUANCE DATE: 6/17/2016

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

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

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

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test and CEMS data.

B. DATE(S) OF SOURCE TEST: November 18, 2015

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: NOx = 0.02 lb/MWe-hr, CO = 0.24 lb/MWe-hr, VOC = 0.04 lb/MWe-hr, NH3 = 2 ppm.

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.		
H. HEALTH RISK FOR PERMIT UNIT		

H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.

Part D: NonSCAQMD BACT Determination

Source Type: **Minor**

Application No.: **558783**

Equipment Category: **I.C. Engine, Stationary, Non-Emergency, Electrical Generators**

Equipment Subcategory: _____

Date: **April 14, 2015**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: GM/Tecogen	B. MODEL: TECODRIVE 7400
C. DESCRIPTION: Spark Ignition, Rich Burn, Four-Cycle, 8 cylinders.	
D. FUNCTION: On-site electrical power generation	
E. SIZE/DIMENSIONS/CAPACITY: 108 HP, driving 75 KW generator	
COMBUSTION SOURCES	
F. MAXIMUM HEAT INPUT: ---	
G. BURNER INFORMATION	

TYPE	INDIVIDUAL HEAT INPUT	NUMBER
---	---	---
Enter additional burner types, as needed, add extra rows		

H. PRIMARY FUEL: NATURAL GAS	I. OTHER FUEL: ---
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR	
K. EQUIPMENT COST: Not Available	
L. EQUIPMENT INFORMATION COMMENTS: Engine is equipped with emission control consisting of non-selective catalytic converter.	

2. COMPANY INFORMATION

A. COMPANY: Playa Capital Company LLC	B. FAC ID: 176353
C. ADDRESS: 12852 Runway Road CITY: Playa Vista STATE: CA ZIP: 90094	D. NAICS CODE: Click "NAICS" for link
E. CONTACT PERSON: Derek Fraychineaud	F. TITLE: VP Residential Dev.
G. PHONE NO.: 310-448-4682	H. EMAIL: derek.fraychineaud@brookfieldrp.com

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION PERMIT TO OPERATE
C. SCAQMD ENGINEER: Jason Taylor	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 3/18/14 P/O NO.: G39943 PO ISSUANCE DATE: 4/14/2015	
E. START-UP DATE: 8/21/2015	
F. OPERATIONAL TIME: 1+ years	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES: List all criteria contaminant or precursor emission limits, including facility limits, on the permit(s) that affects the equipment. Include units, averaging times and corrections (%O_2, %CO_2, dry, etc). For VOC, values must include if the concentration is reported as methane, hexane or any other compound. VOC mass emissions should include the molecular weight-to-carbon ratio, if applicable.

	VOC	NOx	SOx	CO	PM OR PM_{10}	INORGANIC
BACT Limit	0.222 LB/MW-HR	0.156 LB/MW-HR		0.444 LB/MW-HR	RULE 404	
Averaging Time	Measured as Carbon	15 min		15 min		
Correction	15% O_2	15% O_2		15% O_2		

B. OTHER BACT REQUIREMENTS: Compliance with emission requirements of Rule 1110.2(d)(1)(L)

C. BASIS OF THE BACT/LAER DETERMINATION: Compliance with Rule 1110.2(d)(1)(L) and achieved in practiceOther (add comment)

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

5. CONTROL TECHNOLOGY

A. MANUFACTURER: SUD-CHEMIE NSCR	B. MODEL: ENVICAT 7319

C. DESCRIPTION: Non-Selective Catalytic Converter with automatic air/fuel ratio controller, Tecogen, model Teconet Stoichiometric AFRC.

D. SIZE/DIMENSIONS/CAPACITY: ---

E. CONTROL EQUIPMENT PERMIT INFORMATION:

APPLICATION NO. 558783 PC ISSUANCE DATE: 3/18/14
PO NO.: G39943 PO ISSUANCE DATE: 4/14/2015

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

CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM_{10}	___%	___%	___%
INORGANIC	___%	___%	___%

G. CONTROL TECHNOLOGY COMMENTS two stage system with three way catalyst followed by air injection and additional catalyst. Manages air/fuel ratio slightly rich of stoichiometric via oxygen sensors located before and after the first stage three way catalyst.

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test.

B. DATE(S) OF SOURCE TEST: August 21, 2015

C. COLLECTION EFFICIENCY METHOD: The method used to determine collection efficiency of the system (e.g., EPA Method 204, mass balance), if applicable. A brief description of the collection efficiency test may be included if there is no applicable method (e.g., OVA measurements, smoke tests)

D. COLLECTION EFFICIENCY PARAMETERS: The quantitative parameters used to verify the method or procedures in Section 6(C). Examples include static pressure measurements, anemometer measurements, and mass balance results.

E. SOURCE TEST/PERFORMANCE DATA: NOx = 0.014 lb/MWe-hr, CO = 0.083 lb/MWe-hr, VOC = 0.116 lb/MWe-hr.

F. TEST OPERATING PARAMETERS AND CONDITIONS: List any important operating conditions maintained during the source test or normal operations. Examples include, but may not be limited to, pressure differentials across control devices, feed rates, firing rates, temperatures, flow rates, or other parameters used to evaluate the level of operation of the equipment during the test or operations that may affect emissions from the equipment.

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: Enter comments for additional information for Demonstration of Compliance.

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: Click here to enter text.	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: Click here to enter text.	
D. RECLAIM FAC? YES ☐ NO ☐	E. TITLE V FAC: YES ☐ NO ☐	F. SOURCE TEST ID(S): Click here to enter text.	
G. SCAQMD SOURCE SPECIFIC RULES: Click here to enter text.			
H. HEALTH RISK FOR PERMIT UNIT			
H1. MICR: Click here to enter text.	H2. MICR DATE: Click here to enter a date.	H3. CANCER BURDEN: Click here to enter text.	H4. CB DATE: Click here to enter a date.
H5: HIA: Click here to enter text.	H6. HIA DATE: Click here to enter a date.	H7. HIC: Click here to enter text.	H8. HIC DATE: Click here to enter a date.