



## **Section I – South Coast AQMD BACT/LAER Determination**

Source Type: **Major/LAER**  
 Application No.: **437199**  
 Equipment Category: **Furnace, Heat Treating**

Equipment Subcategory: **Aluminum, <970 °F**

Date: **February 5, 2021**

### **1. EQUIPMENT INFORMATION**

A. MANUFACTURER: Granco Clark		B. MODEL: N/A Serial #10238-88
C. DESCRIPTION: Aluminum Billet Furnace or Oven, for 7" diameter billets. Natural gas fired with a 25 HP circulation fan and a 7.5 HP combustion air blower.		
D. FUNCTION: The furnace treats aluminum billets prior to and during extrusion process, where they are fed through dies to form the extruded aluminum channels.		
E. SIZE/DIMENSIONS/CAPACITY: 2ft 6in W. x 36ft L. x 3ft H.		
<b>COMBUSTION SOURCES</b>		
F. MAXIMUM HEAT INPUT: 5.47 MMBtu/hr		
G. BURNER INFORMATION: Low-NOx Burner		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	5.47 MMBtu/hr	1
H. PRIMARY FUEL: Natural Gas		I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 HRS//DAY 7 DAYS/WEEK 52 WKS/YR		
K. EQUIPMENT COST: N/A		
L. EQUIPMENT INFORMATION COMMENTS: The equipment is a RECLAIM process unit. Thermocouple is in contact with the billet during the operation. Billet temperature ranges from 900 to 970 °F.		

### **2. COMPANY INFORMATION**

A. COMPANY: Sierra Aluminum Company	B. FAC ID: 54402
C. ADDRESS: 2345 Fleetwood Drive CITY: Riverside STATE: CA ZIP: 92509	D. NAICS CODE: 33211
E. CONTACT PERSON: Naro Kuch	F. TITLE: Environmental Manager
G. PHONE NO.: (951) 781-7800	H. EMAIL: naro.kuch@sierraaluminum.com

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: MODIFICATION
C. SCAQMD ENGINEER: Monica Fernandez-Neild	
D. PERMIT INFORMATION: P/C ISSUANCE DATE: 12/31/99 P/O NO.: F74295 P/O ISSUANCE DATE: 3/23/2005	
E. START-UP DATE: 2/2/2005	
F. OPERATIONAL TIME: 15 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 <sub>2</sub> , %CO <sub>2</sub> , 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 <sub>10</sub>	INORGANIC
BACT Limit		25 PPMV				
Averaging Time		1 Hour				
Correction		3% O <sub>2</sub>				
B. OTHER BACT REQUIREMENTS: N/A						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS: This is an older model billet oven. Facility stated that rigorous maintenance is required to keep the unit in compliance for NOx. Fuel nozzles and insulation have to be maintained/replaced periodically.						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: N/A		B. MODEL: N/A	
C. DESCRIPTION: N/A			
D. SIZE/DIMENSIONS/CAPACITY: N/A			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO.: N/A                      PC ISSUANCE DATE: N/A PO NO.: N/A                                  PO ISSUANCE DATE: N/A			
F. REQUIRED CONTROL EFFICIENCIES: N/A			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
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: 4/10/2013
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: 16.4 PPMV NOx @3% O2
F. TEST OPERATING PARAMETERS AND CONDITIONS: Normal
G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1

H. MONITORING AND TESTING REQUIREMENTS: For RECLAIM Process Units, the NO <sub>x</sub> concentration limit is tested every 5 years.
I. DEMONSTRATION OF COMPLIANCE COMMENTS: The unit has shown compliance with the 25 ppm NO <sub>x</sub> @ 3% O <sub>2</sub> through the years.

b

## 7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 000302	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 50	
D. RECLAIM FAC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): R16209	
G. SCAQMD SOURCE SPECIFIC RULES: None. Only RECLAIM R2012.			
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 I – South Coast AQMD BACT/LAER Determination**

Source Type: **Major/LAER**  
Application No.: **526607**  
Equipment Category: **Burner**  
Equipment Subcategory: **Duct Burner, Natural Gas & Refinery Gas Fired**  
Date: **February 5, 2021**

### **1. EQUIPMENT INFORMATION**

A. MANUFACTURER: COEN		B. MODEL:	
C. DESCRIPTION: Duct Burner			
D. FUNCTION: This duct burner is part of the Cogen Train D. The cogen includes a combustion Gas Turbine (CGT), Heat Recovery Steam Generator (HRSG) and back-pressure Steam Turbine Generator. Low-NOx combustion and steam injection are used in the turbine for NOx control. The HRSG has been designed with duct burner for extra steam generation, Selective Catalytic Reduction (SCR) for control of NOx emissions and oxidation catalyst for control of CO emissions. CGT burns natural gas and the Duct Burner in the HRSG burns natural gas and/or refinery gas.			
E. SIZE/DIMENSIONS/CAPACITY: 132 MMBtu/hr			
<b>COMBUSTION SOURCES</b>			
F. MAXIMUM HEAT INPUT: 132 MMBTU/hr			
G. BURNER INFORMATION: Low-NOx Burner			
TYPE		INDIVIDUAL HEAT INPUT	NUMBER
		Rated heat input of single burner, in btu/hr	Number of burners
H. PRIMARY FUEL: Refinery Fuel Gas		I. OTHER FUEL: Natural Gas	
J. OPERATING SCHEDULE: Hours 24 HRS//DAY 7 DAYS/WEEK 52 WKS/YR			
K. EQUIPMENT COST: N/A			
L. EQUIPMENT INFORMATION COMMENTS: Enter additional comments regarding Equipment Information			

### **2. COMPANY INFORMATION**

A. COMPANY: Chevron Products Co		B. FAC ID: 800030	
C. ADDRESS: 324 W El Segundo Blvd. CITY: El Segundo STATE: CA ZIP: 90245		D. NAICS CODE: 2911	
E. CONTACT PERSON: Peter Allen		F. TITLE: Air Permitting Lead	
G. PHONE NO.: (310) 615-4182		H. EMAIL: PAllen@chevron.com	

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Rafik Beshai	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 10/27/10 P/O NO.: PO ISSUANCE DATE: 6/14/2019	
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 <sub>2</sub> , % CO <sub>2</sub> , 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 <sub>10</sub>	INORGANIC
BACT Limit			*			
Averaging Time						
Correction						
B. OTHER BACT REQUIREMENTS: *Pipeline quality Natural Gas with Sulfur content $\leq 1$ grains/100 scf; Refinery Fuel gas with Total Reduced Sulfur $\leq 40$ PPMV, 1 – HR rolling avg. and $\leq 30$ PPMV, 24 – HR rolling avg.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS: The sulfur limit is to limit the SOx emissions (Rule 2005 SOx BACT).						

## 5. CONTROL TECHNOLOGY

A. MANUFACTURER: Manufacturer of the equipment		B. MODEL: Model name and number	
C. DESCRIPTION: The total reduced sulfur concentration limit must be measured in the refinery fuel gas before blending with natural gas for all but 72 hours per year. The total reduced sulfur concentration of the refinery fuel gas may be measured after blending with natural gas for a maximum of 72 hours per year.			
D. SIZE/DIMENSIONS/CAPACITY:			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. _____ PC ISSUANCE DATE: <a href="#">Click here to enter a date.</a> PO NO.: M57432 PO ISSUANCE DATE: <a href="#">Click here to enter a date.</a>			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	____%	____%	____%
NO <sub>x</sub>	____%	____%	____%
SO <sub>x</sub>	____%	____%	____%
CO	____%	____%	____%
PM	____%	____%	____%
PM <sub>10</sub>	____%	____%	____%
INORGANIC	____%	____%	____%
G. CONTROL TECHNOLOGY COMMENTS Enter comments for additional information regarding Control Technology.			

## 6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Maintaining the CPMS to continuously monitor the total reduced sulfur compounds calculated as H <sub>2</sub> S concentration in the fuel gases.
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: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
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):
H. MONITORING AND TESTING REQUIREMENTS: Continuous Parametric Monitoring System (conditions # 90.40 and 90.41)
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Unit has shown compliance from CPMS data.

b

## 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 <input checked="" type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S):	
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 I – South Coast AQMD BACT/LAER Determination

Source Type: **Major/LAER**  
 Application No.: **601928, 601929 and 601930**  
 Equipment Category: **Gas Turbine**  
 Equipment Subcategory: **Simple Cycle, Natural Gas**  
 Date: **February 5, 2021**

### 1. EQUIPMENT INFORMATION

A. MANUFACTURER: General Electric		B. MODEL: LM6000 PC SPRINT
C. DESCRIPTION: Simple Cycle natural gas fired turbine with Intercooler and water injection.		
D. FUNCTION: The City of Riverside Public Utilities Department operates the Riverside Energy Resource Center facility which operates this gas turbine which produces electrical power for the city. The equipment is at a “Peaker” plant to support California Independent System Operator (CAISO) during periods of high electricity demand.		
E. SIZE/DIMENSIONS/CAPACITY: Net Power Output 49.8 MW		
<b>COMBUSTION SOURCES</b>		
F. MAXIMUM HEAT INPUT: 490 MMBTU/hr		
G. BURNER INFORMATION:		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	Rated heat input of single burner, in btu/hr	Number of burners
H. PRIMARY FUEL: Natural Gas		I. OTHER FUEL: Supplementary or standby fuels
J. OPERATING SCHEDULE: Hours 24 HRS//DAY 7 DAYS/WEEK 52 WKS/YR		
K. EQUIPMENT COST: N/A		
L. EQUIPMENT INFORMATION COMMENTS: Gas turbine is equipped with SCR and Oxidation catalyst.		

### 2. COMPANY INFORMATION

A. COMPANY: City of Riverside Public Utilities Dept.	B. FAC ID: 139796
C. ADDRESS: 5901 Payton Avenue CITY: Riverside STATE: CA ZIP: 92504	D. NAICS CODE: 221112
E. CONTACT PERSON: Charles Casey	F. TITLE: Utility Generation Manager
G. PHONE NO.: 951-710-5010	H. EMAIL: ccasey@riversideca.gov

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Vicky Lee	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 2/20/09 P/O NO.: G57637 PO ISSUANCE DATE: 6/13/2019	
E. START-UP DATE: 6/14/2013	
F. OPERATIONAL TIME: 6+ years (original P/O issued on 6/14/13, G25360, A/N: 481647)	

**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 <sub>2</sub> , % CO <sub>2</sub> , 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.						
	<b>VOC</b>	<b>NOx</b>	<b>SOx</b>	<b>CO</b>	<b>PM OR PM<sub>10</sub></b>	<b>INORGANIC</b>
BACT Limit		2.3 PPMV		4 PPMV		
Averaging Time		1 HOUR		1 HOUR		
Correction		15 % O <sub>2</sub>		15 % O <sub>2</sub>		
B. OTHER BACT REQUIREMENTS: The NOx and CO emission limit shall not apply during turbine commissioning, start-up, shutdown, and equipment tuning.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS:						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: SCR - Cormetech, CO OxyCat – BASF Catalyst LLC		B. MODEL: SCR – No. 3, CO OxyCat - Canmet	
C. DESCRIPTION: Ammonia Injection Grid with aqueous ammonia 19% stored in a 12,000-gallon tank.			
D. SIZE/DIMENSIONS/CAPACITY: SCR – 1024 cu ft: Width 8’- 11.6”, Height 6’ – 5”, Length 3’ – 2”. CO Oxycat – 90 cu ft: Width 2’- 0”, Height 2’ – 4”, Depth 0’ – 3”			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. 481651 PC ISSUANCE DATE: 6/19/09 PO NO.: G25363 PO ISSUANCE DATE: 6/26/2013			
F. REQUIRED CONTROL EFFICIENCIES: .			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NO <sub>x</sub>	___%	___%	___%
SO <sub>x</sub>	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS: The permit also has a limit of 2 ppm for VOC and 5 ppm for ammonia slip corrected to 15% O <sub>2</sub> .			

**6. DEMONSTRATION OF COMPLIANCE**

A. COMPLIANCE DEMONSTRATED BY: CEMS data for a period of one year (2019) and SOURCE TEST results
B. DATE(S) OF SOURCE: Please refer to Section E
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A

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

RATA Test Date	Unit 3	RATA Test Date	Unit 4
4/15/20	NOx = 1.83 ppm CO = 3.58 ppm	4/16/20	NOx = 2.13 ppm CO = 2.71 ppm
9/10/19	NOx = 2.14 ppm CO = 2.97 ppm	10/3/19	NOx = 2.23 ppm CO = 2.28 ppm
8/14/18	NOx = 2.01 ppm CO = 2.98 ppm	2/2/18	NOx = 2.26 ppm CO = 2.95 ppm

F. TEST OPERATING PARAMETERS AND CONDITIONS: Full load.

G. TEST METHODS (SPECIFY AGENCY): Method 100.1 for NOx and CO.

H. MONITORING AND TESTING REQUIREMENTS: Continuous Emissions Monitoring System and Compliance test every three years.

I. DEMONSTRATION OF COMPLIANCE COMMENTS: Unit has shown compliance from source test and CEMS data.

## 7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 013008	B. CCAT: 81	C. APPLICATION TYPE CODE: 20	
D. RECLAIM FAC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S):	
G. SCAQMD SOURCE SPECIFIC RULES: Rule 2012			
H. HEALTH RISK FOR PERMIT UNIT			
H1. MICR: <a href="#">Click here to enter text.</a>	H2. MICR DATE: <a href="#">Click here to enter a date.</a>	H3. CANCER BURDEN: <a href="#">Click here to enter text.</a>	H4. CB DATE: <a href="#">Click here to enter a date.</a>
H5. HIA: <a href="#">Click here to enter text.</a>	H6. HIA DATE: <a href="#">Click here to enter a date.</a>	H7. HIC: <a href="#">Click here to enter text.</a>	H8. HIC DATE: <a href="#">Click here to enter a date.</a>



## **Section I – South Coast AQMD BACT/LAER Determination**

Source Type: **Major/LAER**  
Application No.: **585124**  
Equipment Category: **Thermal Fluid Heater**  
Equipment Subcategory: **Natural Gas**  
Date: **February 5, 2021**

### **1. EQUIPMENT INFORMATION**

A. MANUFACTURER: Sigma Thermal		B. MODEL: HC2-6.0-H-SF
C. DESCRIPTION: Hot oil heater		
D. FUNCTION: Owens Corning Roofing and Asphalt is a manufacturer asphalt roofing shingles and operates a thermal fluid heater circulating hot oil through hollow agitators in a closed mixing vessel to heat limestone filler which is blended with asphalt prior to application on shingles.		
E. SIZE/DIMENSIONS/CAPACITY:		
<b>COMBUSTION SOURCES</b>		
F. MAXIMUM HEAT INPUT: 4.5 MM Btu/hr		
G. BURNER INFORMATION: MAXON M-PAKT, MODEL: MPBD4RSFNNA		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
LOW NOX	4.5 MM Btu/hr	one
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: N/A		
L. EQUIPMENT INFORMATION COMMENTS: Exhaust system consisting of one 200 HP exhaust fan.		

### **2. COMPANY INFORMATION**

A. COMPANY: Owens Corning Roofing and Asphalt, LLC		B. FAC ID: 35302
C. ADDRESS: 1501 N. Tamarind Ave. CITY: Compton STATE: CA ZIP: 90222		D. NAICS CODE: 324121
E. CONTACT PERSON: Tim Hellem		F. TITLE: EH&S Leader
G. PHONE NO.: (424) 296-6039	H. EMAIL: tim.hellem@owenscorning.com	

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Gregory Jacobson	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 12/20/16 P/O NO.: G48769 PO ISSUANCE DATE: 10/17/2017	
E. START-UP DATE: 10/17/2017	
F. OPERATIONAL TIME: 2+ 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 <sub>2</sub> , %CO <sub>2</sub> , 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.						
	<b>VOC</b>	<b>NOx</b>	<b>SOx</b>	<b>CO</b>	<b>PM OR PM<sub>10</sub></b>	<b>INORGANIC</b>
BACT Limit		9 ppm		100		
Averaging Time		60 min		60 min		
Correction		3% O <sub>2</sub> on a dry basis		3% O <sub>2</sub> on a dry basis		
B. OTHER BACT REQUIREMENTS: Burner emissions only.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS:						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: Manufacturer of the equipment		B. MODEL: Model name and number	
C. DESCRIPTION:			
D. SIZE/DIMENSIONS/CAPACITY:			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. <a href="#">Click here to enter text.</a> PC ISSUANCE DATE: PO NO.: <a href="#">Click here to enter text.</a> PO ISSUANCE DATE: <a href="#">Click here to enter a date.</a>			
F. REQUIRED CONTROL EFFICIENCIES: .			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NO <sub>x</sub>	___%	___%	___%
SO <sub>x</sub>	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS			

**6. DEMONSTRATION OF COMPLIANCE**

A. COMPLIANCE DEMONSTRATED BY: Source Test (R18252)
B. DATE(S) OF SOURCE TEST: 12/13/17 & 12/15/17
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: N/A
F. TEST OPERATING PARAMETERS AND CONDITIONS:.
G. TEST METHODS (SPECIFY AGENCY): N/A
H. MONITORING AND TESTING REQUIREMENTS:
I. DEMONSTRATION OF COMPLIANCE COMMENTS: Enter comments for additional information for Demonstration of Compliance.

**7. ADDITIONAL SCAQMD REFERENCE DATA**

A. BCAT: 000340	B. CCAT: Click here to enter text.	C. APPLICATION TYPE CODE: 60	
D. RECLAIM FAC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): R18252	
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 I - South Coast AQMD BACT/LAER Determination**

Source Type: **Major/LAER**  
Application No.: **571478**  
Equipment Category: **I.C. Engine**  
Equipment Subcategory: **Stationary, Non-Emergency,  
Electrical Generator**  
Date: **February 5, 2021**

### **1. EQUIPMENT INFORMATION**

A. MANUFACTURER: Generac		B. MODEL: 6.8GN GD-100
C. DESCRIPTION: I.C. Engine, Stationary, Non-Emergency, Rich-Burn		
D. FUNCTION: SoCalGas' Aliso Canyon Storage Facility is an underground natural gas storage site. This is one of four prime engines generating electrical power to remote sites where various equipment is located, such as pumps and/or compressors and/or controls.		
E. SIZE/DIMENSIONS/CAPACITY: 147 BHP, naturally aspirated, 10 cylinders driving a 100 kW generator and 385 BHP, naturally aspirated, 6 cylinders driving a 250 kW generator.		
<b>COMBUSTION SOURCES</b>		
F. MAXIMUM HEAT INPUT: N/A		
G. BURNER INFORMATION: N/A		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
N/A	N/A	N/A
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: N/A		
L. EQUIPMENT INFORMATION COMMENTS: This engine was retrofitted with the Tecogen Ultra Retrofit Emissions Kit.		

### **2. COMPANY INFORMATION**

A. COMPANY: Southern California Gas Company		B. FAC ID: 800128
C. ADDRESS: 12801 Tampa Ave. CITY: Northridge STATE: CA ZIP: 91326		D. NAICS CODE: 486210
E. CONTACT PERSON: John Clarke		F. TITLE: Principal Air Quality Specialist
G. PHONE NO.: (818) 700-3812	H. EMAIL: JCLARKE1@SEMPRAUTILITIES.COM	

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: MODIFICATION
C. SCAQMD ENGINEER: Roy Olivares	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 9/9/16 P/O NO.: G52129 PO ISSUANCE DATE: 8/13/2019	
E. START-UP DATE: 6/19/2017	
F. OPERATIONAL TIME: 2+ 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 <sub>2</sub> , % CO <sub>2</sub> , 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.						
	<b>VOC</b>	<b>NOx</b>	<b>SOx</b>	<b>CO</b>	<b>PM OR PM<sub>10</sub></b>	<b>INORGANIC</b>
BACT Limit	0.1 lbs/MW-hr	0.07 lbs/MW-hr		0.2 lbs/MW-hr		
Averaging Time	15 min	15 min		15 min		
Correction	15% O <sub>2</sub>	15% O <sub>2</sub>		15% O <sub>2</sub>		
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:						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: TECOGEN / DCL		B. MODEL: SSC150/2-DC49 CC	
C. DESCRIPTION: Tecogen Ultra Emissions Retrofit Kit control system, comprised of Three-Way Catalyst (DCL) with Air/Fuel Ratio Controller (Continental Controls Air/Fuel Ratio Controller Model EGO2) and Oxidation Catalyst (Tecogen proprietary).			
D. SIZE/DIMENSIONS/CAPACITY: N/A			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. same PC ISSUANCE DATE: same PO NO.: same PO ISSUANCE DATE: same			
F. REQUIRED CONTROL EFFICIENCIES: .			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NO <sub>x</sub>	___%	___%	___%
SO <sub>x</sub>	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS: This system is retrofitted with an electrical load bank, which must be operated in order to continuously meet permitted emissions limits. Catalyst life has been short due to system back pressure, condensation, and high exhaust temperatures.			

**6. DEMONSTRATION OF COMPLIANCE**

A. COMPLIANCE DEMONSTRATED BY: Source Test
B. DATE(S) OF SOURCE TEST: 10/22-26/19
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: N/A
F. TEST OPERATING PARAMETERS AND CONDITIONS:
G. TEST METHODS (SPECIFY AGENCY): South Coast AQMD
H. MONITORING AND TESTING REQUIREMENTS:

I. DEMONSTRATION OF COMPLIANCE COMMENTS: This test includes results for five engines at So Cal Gas' Aliso Canyon storage facility.

## 7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 040001	B. CCAT: 00	C. APPLICATION TYPE CODE: 60	
D. RECLAIM FAC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): 18316	
G. SCAQMD SOURCE SPECIFIC RULES: Rule 1110.2			
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 I – South Coast AQMD BACT/LAER Determination

Source Type: **Major/LAER**  
 Application No.: A/N 582931 P/O G49447  
 Equipment Category: **Thermal Oxidizer**  
 Equipment Subcategory: **Flare - Liquid Transfer and Handling Marine Loading**  
 Date: **February 5, 2021**

### 1. EQUIPMENT INFORMATION

A. MANUFACTURER: AEREON		B. MODEL: CEB 800-CA	
C. DESCRIPTION: Marine Vapor Control System – two thermal oxidizers			
D. FUNCTION: Controlling vapors from marine vessel loading			
E. SIZE/DIMENSIONS/CAPACITY: Each thermal oxidizer is 39 mmbtu/hr and handles 3500 bbl/hr loading rate			
<b>COMBUSTION SOURCES</b>			
F. MAXIMUM HEAT INPUT: Each thermal oxidizer is 39 mmbtu/hr			
G. BURNER INFORMATION			
TYPE	INDIVIDUAL HEAT INPUT	NUMBER	
Ultra low emissions	39,000,000 btu/hr	1	
H. PRIMARY FUEL: petroleum liquid vapors		I. OTHER FUEL: natural gas supplemental	
J. OPERATING SCHEDULE: 24 HRS/DAY 7 DAYS/WEEK 52 WKS/YR (Maximum but actually only operated during marine vessel loading)			
K. EQUIPMENT COST: Enter sum of all Cost Factors in Table 6 of SCAQMD BACT Guidelines			
L. EQUIPMENT INFORMATION COMMENTS:			

### 2. COMPANY INFORMATION

A. COMPANY: Tesoro Logistics Long Beach Terminal		B. FAC ID: 172878	
C. ADDRESS: 820 Carrack Ave CITY: Long Beach STATE: CA ZIP: 90813		D. NAICS CODE: 424710	
E. CONTACT PERSON: Donna DiRocco		F. TITLE: Sr. Env. Advisor	
G. PHONE NO.: (562) 499-2202		H. EMAIL: donna.m.dirocco@andeavor.com	

**3. PERMIT INFORMATION**

A. AGENCY: South Coast A.Q.M.D	B. APPLICATION TYPE: MODIFICATION
C. SCAQMD ENGINEER: Linda Dejbakhsh	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 11/28/17 P/O NO.: G49447 (This was issued as P/C-P/O) PO ISSUANCE DATE: 11/28/2017	
E. START-UP DATE: 8/7/2018	
F. OPERATIONAL TIME: less than 2000 hours since August 2018 (per email from DiRocco 6/14/19)	

**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 <sub>2</sub> , %CO <sub>2</sub> , 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.						
	<b>VOC</b>	<b>NOx</b>	<b>SOx</b>	<b>CO</b>	<b>PM OR PM<sub>10</sub></b>	<b>INORGANIC</b>
BACT Limit		0.036 lb/MMBtu (30 ppm)		0.01 lb/MMBtu (10 ppm)		
Averaging Time		15 min		15 min		
Correction		3% O <sub>2</sub> on a dry basis		3% O <sub>2</sub> on a dry basis		
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: AEREON guaranteed and confirmed with source test						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: AEREON		B. MODEL: CEB 800-CA	
C. DESCRIPTION: Equipment controls VOCs displaced from marine vessel loading of petroleum liquids (such as gasoline, diesel, or crude). The thermal oxidizers can operate in parallel or individually			
D. SIZE/DIMENSIONS/CAPACITY: Each thermal oxidizer is rated at 39 mmbtu/hr and 3500 bbl/hr load rate			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. 582931      PC ISSUANCE DATE: 11/28/17 PO NO.: G49447              PO ISSUANCE DATE: 11/28/2017			
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	___%	___%	___%
NO <sub>x</sub>	___%	___%	___%
SO <sub>x</sub>	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS: Whenever the thermal oxidizer (flare) is in operation, a temperature not less than 1,400 degrees Fahrenheit (on a 15 minute average) shall be maintained in the combustion chamber when the equipment it serves is in operation (marine vessel loading only), except for periods of startup and shutdown. VOC emissions are limited to 2 lbs/1000 bbls liquid loaded or 95% VOC reduction by weight from uncontrolled emissions.			

**6. DEMONSTRATION OF COMPLIANCE**

A. COMPLIANCE DEMONSTRATED BY: Source test conducted April 2019 by Almega
B. DATE(S) OF SOURCE TEST: April 9, 2019
C. COLLECTION EFFICIENCY METHOD: SCAQMD 25.3 and 25.1
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: NO <sub>x</sub> <0.012 lb/mmbtu (<9.61 ppm@3%O <sub>2</sub> ), NO <sub>x</sub> <0.013 lb/mmbtu (9.83 ppm@3%O <sub>2</sub> ), CO < 0.0074 lb/mmbtu (9.61 ppm@3%O <sub>2</sub> ), CO <0.0054 lb/mmbtu (6.95 ppm@3%O <sub>2</sub> )

F. TEST OPERATING PARAMETERS AND CONDITIONS: NOx and CO conducted during first 50% of liquid cargo loaded. TNMNEO and toxics conducted during last 50% of cargo loaded. Load condition of ThOx's were 13.3 MMBtu/hr and 12.8 MMBtu/hr of capacity. Vessel was loading Arab LT Crude Oil. Previous load was high sulfur fuel oil
G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 100.1, 25.3, 25.1, EPA TO-15
H. MONITORING AND TESTING REQUIREMENTS: NOx, CO, and VOC tested every 5 years
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: 05	C. APPLICATION TYPE CODE: Click here to enter text.	
D. RECLAIM FAC? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): P18289	
G. SCAQMD SOURCE SPECIFIC RULES: R1118.1, R1142			
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 - South Coast AQMD BACT/LAER Determination

Source Type: **Major/LAER**  
 Application No.: **563766**  
 Equipment Category: **Thermal Oxidizer**  
 Equipment Subcategory: **Recuperative**  
 Date: **February 5, 2021**

### 1. EQUIPMENT INFORMATION

A. MANUFACTURER: Catalytic Products International		B. MODEL: Quadrant SRS-12,000
C. DESCRIPTION: The Recuperative Thermal Oxidizer is a control equipment unit controlling VOC emissions from coating and curing system. It contains one Shell-and-Tube heat exchanger and employs a single MAXON Kinedizer LE Low NOx Burner firing natural gas with a maximum rated heat capacity of 9.8 MMBtu/hr. The unit operates at a minimum combustion chamber temperature of 1,400 degree Fahrenheit.		
D. FUNCTION: 3M Industrial Adhesive and Tape Company a manufacturer of specialty tapes and fabrics used in various industries. 3M operates a recuperative thermal oxidizer and two tower coaters (coating stations and ovens) used to cure impregnated fabrics. The emissions measurement was conducted at the exhaust from a total enclosure.		
E. SIZE/DIMENSIONS/CAPACITY: 47'-8" W x 18'-6" D x 40'-0" H		
<b>COMBUSTION SOURCES</b>		
F. MAXIMUM HEAT INPUT: Gross heat input in btu per hour at the higher heating value of the fuel		
G. BURNER INFORMATION: Low-NO <sub>x</sub>		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Maxon, Kinedizer LE 6 inch	9.8 MM Btu/hr	one
H. PRIMARY FUEL: Natural gas		I. OTHER FUEL: N/A
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52		
K. EQUIPMENT COST: N/A		
L. EQUIPMENT INFORMATION COMMENTS: Exhaust system consisting of one 75 hp blower venting the coating and curing lines operations within a total enclosure.		

### 2. COMPANY INFORMATION

A. COMPANY: 3M Company		B. FAC ID: 35188
C. ADDRESS: 1601 S. Shamrock Ave. CITY: Monrovia STATE: CA ZIP: 91016		D. NAICS CODE: 2295
E. CONTACT PERSON: Jen Cowman Moore		F. TITLE: Senior Environmental Engineer
G. PHONE NO.: (651) 737 - 3596	H. EMAIL: JCMOORE@MMM.COM	

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Rene Loof	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 6/25/14 P/O NO.: G42337 PO ISSUANCE DATE: 8/17/2016	
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: 3+ 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 <sub>2</sub> , %CO <sub>2</sub> , 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.						
	<b>VOC</b>	<b>NOx</b>	<b>SOx</b>	<b>CO</b>	<b>PM OR PM<sub>10</sub></b>	<b>INORGANIC</b>
BACT Limit		30 PPM		250 PPM		
Averaging Time		*				
Correction		3% O <sub>2</sub> on a dry basis		3% O <sub>2</sub> on a dry basis		
B. OTHER BACT REQUIREMENTS: Fresh air only.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS: * Compliance with Rule 1147 averaging time.						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: Catalytic Products International		B. MODEL: Quadrant SRS-12,000	
C. DESCRIPTION: Recuperative Thermal Oxidizer controlling VOC emissions contains one Shell-and-Tube heat exchanger and employs a single MAXON Kinedizer LE Low NOx Burner firing natural gas.			
D. SIZE/DIMENSIONS/CAPACITY: : 47'-8" W x 18'-6" D x 40'-0" H			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. same PC ISSUANCE DATE: same PO NO.: same PO ISSUANCE DATE: same			
F. REQUIRED CONTROL EFFICIENCIES: .			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS: The combustion chamber temperature shall be maintained at a minimum of 1,400 degree Fahrenheit whenever the equipment it serves is in operation. The equipment shall be maintained and operated at a minimum destruction efficiency of 95% and an overall VOC control efficiency (collection and destruction) of 95% when the basic equipment it serves is in operation.			

**6. DEMONSTRATION OF COMPLIANCE**

A. COMPLIANCE DEMONSTRATED BY: Source Test PR14344
B. DATE(S) OF SOURCE TEST: 7/22/2015
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: NOx: 24.3 PPMVD @ 3% O <sub>2</sub> CO: 39.1 PPMVD @ 3% O <sub>2</sub> Inlet VOC (TGMNNEO) as methane: 9,521 PPMV Exhaust VOC (TGMNNEO) as methane: 1.4 PPMV VOC Destruction Removal Efficiency (DRE): 99.98%
F. TEST OPERATING PARAMETERS AND CONDITIONS: VOC DRE test results are based on the average of three 60-minute sample runs.
G. TEST METHODS (SPECIFY AGENCY): NOx, CO, O <sub>2</sub> , and CO <sub>2</sub> using South Coast AQMD Method 100.1 VOC: South Coast AQMD Method 25.1 (Inlet) and Method 25.3 (Exhaust)
H. MONITORING AND TESTING REQUIREMENTS:

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: 5	C. APPLICATION TYPE CODE: 60	
D. RECLAIM FAC? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): P14344	
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 I – South Coast AQMD BACT/LAER Determination

Source Type: **Major/LAER**  
 Application No.: **602295**  
 Equipment Category: **Thermal Oxidizer**

Equipment Subcategory: **Regenerative**

Date: **February 5, 2021**

### 1. EQUIPMENT INFORMATION

A. MANUFACTURER: TANN		B. MODEL: TR3092
C. DESCRIPTION: Regenerative Thermal Oxidizer (RTO) controlling VOC emissions.		
D. FUNCTION: Steelscape is a supplier of metallic-coated and pre-painted steel, servicing the construction industry. Steelscape conducts metal coil coatings operations at the facility. Steelscape owns and operates an RTO. The prime and finish coating heads are housed in separate rooms that were prepared as PTE's and vented indirectly to the RTO.		
E. SIZE/DIMENSIONS/CAPACITY: 42' W x 23'-6" L, Dual Ceramic Heat Exchanger Media and 25 HP combustion air blower.		
<b>COMBUSTION SOURCES</b>		
F. MAXIMUM HEAT INPUT: 9.8 MM Btu/hr start-up natural gas injection system		
G. BURNER INFORMATION: LOW-NO <sub>x</sub>		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
MAXON, KINEDIZER LE	9.8 MM Btu/hr	one
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: N/A		
L. EQUIPMENT INFORMATION COMMENTS: Exhaust system consisting of one 400 hp exhaust blower.		

### 2. COMPANY INFORMATION

A. COMPANY: Steelscape Inc.		B. FAC ID: 126498
C. ADDRESS: 11200 Arrow Hwy CITY: Rancho Cucamonga STATE: CA ZIP: 91730		D. NAICS CODE: 3479
E. CONTACT PERSON: Frank Ramos		F. TITLE: EHS Coordinator
G. PHONE NO.: (909) 484-4653	H. EMAIL: Francisco.Ramos@steelscape.com	

**3. PERMIT INFORMATION**

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: <b>Hemang Desai</b>	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 10/30/18 P/O NO.: <a href="#">Click here to enter text</a> PO ISSUANCE DATE: 2/27/2020	
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: 6+ months	

**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 <sub>2</sub> , %CO <sub>2</sub> , 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 <sub>10</sub>	INORGANIC
BACT Limit		30 ppm		100 ppm		
Averaging Time		*				
Correction		3% O <sub>2</sub> on a dry basis		3% O <sub>2</sub> on a dry basis		
B. OTHER BACT REQUIREMENTS: Burner emissions only.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS: * Compliance with Facility Permit - Section E averaging time.						

**5. CONTROL TECHNOLOGY**

A. MANUFACTURER: TANN		B. MODEL: TR3092	
C. DESCRIPTION: Regenerative Thermal Oxidizer venting prime and finish coaters.			
D. SIZE/DIMENSIONS/CAPACITY: 42' W x 23'-6" L, Dual Ceramic Heat Exchanger Media and 25 HP combustion air blower.			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. same PC ISSUANCE DATE: same PO NO.: same PO ISSUANCE DATE: same			
F. REQUIRED CONTROL EFFICIENCIES: .			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM <sub>10</sub>	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS: The combustion chamber temperature shall be maintained at a minimum of 1,500 degrees Fahrenheit whenever the equipment it serves is in operation. The operator shall maintain this equipment to achieve a minimum destruction efficiency of 95 percent and a minimum overall control efficiency of 95 percent for VOC during the normal operation of the equipment it vents.			

**6. DEMONSTRATION OF COMPLIANCE**

A. COMPLIANCE DEMONSTRATED BY: Source Test
B. DATE(S) OF SOURCE TEST: 3/26/2019
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: CO concentration at startup: 83 ppm @ 3% O2 NOx concentration at startup: 23.4 ppm @ 3% O2
F. TEST OPERATING PARAMETERS AND CONDITIONS: N/A
G. TEST METHODS (SPECIFY AGENCY): South Coast AQMD Method 100.1 for NOx and CO. South Coast AQMD Method 25.1/25.3 for VOC destruction efficiency.

H. MONITORING AND TESTING REQUIREMENTS:
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: 12	C. APPLICATION TYPE CODE: 60	
D. RECLAIM FAC? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): PR18364	
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.