



South Coast
AQMD

Part B, Section 1 - SCAQMD BACT Determination

Source Type: **Major/LAER**
 Application No.: **573110**
 Equipment Category: **Soil Vapor Extraction**
 Equipment Subcategory: **Thermal/Catalytic Oxidizer**
 Date: **February 1, 2019**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Catalytic Combustion, Inc.		B. MODEL: Model 2 Flame-Ox	
C. DESCRIPTION: In situ soil vapor extraction system for non-halogenated hydrocarbon vapors consisting of extraction wells, extraction blower (575 scfm), knockout tank, Flame Oxidizer and exhaust stack.			
D. FUNCTION: The SVE system will be used for the remediation of non-halogenated hydrocarbon contaminated soil.			
E. SIZE/DIMENSIONS/CAPACITY: Exhaust stack 22" I.D. x 25' H., without rain cap, 1400 scfm			
COMBUSTION SOURCES			
F. MAXIMUM HEAT INPUT: 4,000,000 Btu/hr, North American, Model 6514-8A burner			
G. BURNER INFORMATION			
TYPE		INDIVIDUAL HEAT INPUT	NUMBER
Make and model of burner		Rated heat input of single burner, in btu/hr	Number of burners
Enter additional burner types, as needed, add extra rows			
H. PRIMARY FUEL: NATURAL GAS		I. OTHER FUEL: non-halogenated hydrocarbon vapors	
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52			
K. EQUIPMENT COST:			
L. EQUIPMENT INFORMATION COMMENTS:			

2. COMPANY INFORMATION

A. COMPANY: Tesoro Refining and Marketing Co., LLC		B. FAC ID: 174727	
C. ADDRESS: 8601 S. Garfield Ave. CITY: South Gate STATE: CA ZIP: 90280		D. NAICS CODE: 324110	
E. CONTACT PERSON: Darrel Fah		F. TITLE: Managing Director	
G. PHONE NO.: (562) 495-6876		H. EMAIL: ---	

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Gregory Brian Speaks	
D. PERMIT INFORMATION: PC ISSUANCE DATE: 3/3/16 P/O NO.: G51297 PO ISSUANCE DATE: 3/28/2018	
E. START-UP DATE: 11/17/2016	
F. OPERATIONAL TIME: 1.5 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 PM₁₀	INORGANIC
BACT Limit		30 PPMV				
Averaging Time						
Correction		@ 3% O ₂				
B. OTHER BACT REQUIREMENTS: The limit is for burner only emissions.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Catalytic Combustion, Inc.(Thermal Oxidation)		B. MODEL: Model 2 Flame-Ox	
C. DESCRIPTION: 3-in-1 Flame Oxidizer			
D. SIZE/DIMENSIONS/CAPACITY: 4,000,000 Btu/hr, North American, Model 6514-8A burner.			
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: See Emission Information in Section 4.			
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: November 17, 2016
C. COLLECTION EFFICIENCY METHOD: N/A
D. COLLECTION EFFICIENCY PARAMETERS: N/A
E. SOURCE TEST/PERFORMANCE DATA: 27.3 PPMV NOx @3% O2; <186 PPMV CO @3% O2; <16 PPMV VOC @3% O2
F. TEST OPERATING PARAMETERS AND CONDITIONS: SVE system was operated at normal operating conditions for test.
G. TEST METHODS (SPECIFY AGENCY): SCAQMD Methods 100.1, 25.3 and 1.1-4.1.
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:

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 028000	B. CCAT: Click here to enter text.	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): PR16244	
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.