South Coast AQMD

Part B, Section 1, SCAQMD BACT Determination

Flare

Source Type: Major/LAER

Application No.: 513835

Equipment Category:

Equipment Subcategory: Digester Gas, Wastewater

Date: March 15, 2017

1.	EQUIPMENT INFORMATION	
A.	MANUFACTURER: Bekaert	B. MODEL: CEB 350
C.	DESCRIPTION: 12 MMBtu/hr enclosed flare, dig	ester gas fired with natural gas pilots

D. FUNCTION: Flare incinerates excess digester gas not used as fuel in the boilers or fuel cell system, or to relieve pressure from storage tanks.

E. SIZE/DIMENSIONS/CAPACITY: 3'-8" W. x 3' 8" L. x 23'-4" H., 12 MMBtu/hr, 333 SCFM digester gas permitted limit

COMBUSTION SOURCES

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

ТҮРЕ	INDIVIDUAL HEAT INPUT	NUMBER		
NIT MESH	NIT MESH 12 MMBtu/hr			

H. PRIMARY FUEL: DIGESTER GAS I. OTHER FUEL: NATURAL GAS (PILOT)

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

K. EQUIPMENT COST:

L. EQUIPMENT INFORMATION COMMENTS: FLARE OPERATES INTERMITTANTLY AS NEEDED SECONDARY TO FUEL CELLS AND BOILER. MAINTENANCE IMPROVEMENTS FOR THERMOCOUPLES, IGNITERS AND THE EXHAUST STACK WERE MADE BY THE FACILITY TO IMPROVE RELIABLE OPERATION. THE FLARE IS LOCATED AT A SEWAGE TREATMENT PLANT.

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:

	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	1 HR	1 HR		1 HR			
Correction							

B. OTHER BACT REQUIREMENTS:

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

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

5. CONTROL TECHNOLOGY								
A. MANUFACTU	JRER:	B. MODEL:						
C. DESCRIPTION	C. DESCRIPTION:							
D. SIZE/DIMENS	SIONS/CAPACITY:							
E. CONTROL EQ	UIPMENT PERMIT INFORMA	ATION:						
APPLICATION PO NO.:	N NO.	PC ISSUANCE DATE: PO ISSUANCE DATE:						
F. REQUIRED CO	ONTROL EFFICIENCIES:							
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY					
VOC	%	%	%					
NOx	%	%	%					
SOx	%	%	%					
СО	%	%	%					
PM	%	%	%					
PM ₁₀	%	%	%					
INORGANIC	%	%	%					
G. CONTROL TEC	CHNOLOGY COMMENTS							
6. DEMONS	STRATION OF COMPL	IANCE						
A. COMPLIANCE	E DEMONSTRATED BY: So	urce Test						
B. DATE(S) OF S	OURCE TEST: 11/9/2011							
C. COLLECTION	EFFICIENCY METHOD: N/A	A						
D. COLLECTION	EFFICIENCY PARAMETERS	S: N/A						
E. SOURCE TEST/PERFORMANCE DATA: 96.9% TGNMO Destruction Effic., 99.99 HC destruction Effic., 0.70 ppm VOC (as hexane) @3%O2, 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)								
E TEST ODED ATING DAD AMETEDS AND CONDITIONS, 246 deafty dispeter and								
F. TEST OPERATING PARAMETERS AND CONDITIONS: 246 dscfm digester gasG. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.3, 100.1, ARB Mod. Method 307.91								
	G. TEST METHODS (SI ECH T MOENCE), SCHQIND 25.5, 100.1, ARD Word. McHod 507.91							
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:								

7. ADDITIONAL SCAQMD REFERENCE DATA

A.	A. BCAT:		B. CCAT: 50		C. APPLICATION TYPE CODE: 10			
D.	O. RECLAIM FAC?		E. TITLE V FAC:		F. SOURCE TEST ID(S):			
	YES □ NO □		YES 🗵	NO				
G.	SCAQMD SOURCE SPECIFIC RULES:							
H.	H. HEALTH RISK FOR PERMIT UNIT							
H1.	MICR: 6.55 x10-9	H2. 1	MICR DATE: 6/1	9/13	H3. CANCER B <0.5		BURDEN:	H4. CB DATE: 6/19/13
H5:	HIA:	H6. 1	HIA DATE:		H7. HIC:			H8. HIC DATE: