



Part B, 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	
ZULE		13.1 MMBtu/hr	
NUMBER			
3			
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:			
L. EQUIPMENT INFORMATION COMMENTS: INTERMITTANT OPERATION TO PROCESS DIGESTER GAS.			

2. COMPANY INFORMATION

A. COMPANY: Inland Empire Utilities Agency RP-5 SHF		B. FAC ID: 147371	
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: > 6 months	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:						
	VOC	NOx	SOx	CO	PM OR PM₁₀	INORGANIC
BACT Limit		0.025 lb/MMBtu		0.06 lb/MMBtu		
Averaging Time		1 HR		1 HR		
Correction						
B. OTHER BACT REQUIREMENTS: Maximum 32.4 MMBtu/hr digester gas (Condition 7 – project specific). 1500°F Min temp (Condition 9 – project specific). Performance tests every 5 years (Condition 12). Per source test PM10 as PM.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS: Permit does not have minimum VOC destruction efficiency or residence time requirements.						

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	___%	___%	___%
NO _x	___%	___%	___%
SO _x	___%	___%	___%
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 CH ₄); 0.08 lb VOC/hr (as CH ₄); < 0.0046 lb CO/MMBtu; 5.9 ppm CO @ 3% O ₂ ; 0.016 lb/MMBtu NO _x ; 12.3 ppm NO _x @ 3% O ₂ ; 0.01 lb SO _x /hr (as SO ₂); 0.096 lb PM/hr;
F. TEST OPERATING PARAMETERS AND CONDITIONS: 279 dscfm digester gas. Minimum flow during S/T run 133.5 dscfm.
G. TEST METHODS (SPECIFY AGENCY): SCAQMD 25.3, 100.1, SCAQMD 5.1, ARB Mod. Method 307.91
H. MONITORING AND TESTING REQUIREMENTS: Source Testing every 5 years for Methane, TGNMO, NO _x , CO, SO _x , PM ₁₀ (as PM), O ₂ , N ₂ , H ₂ O, Temp and Flow

I. DEMONSTRATION OF COMPLIANCE COMMENTS:

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT:		B. CCAT: 50		C. APPLICATION TYPE CODE: 10	
D. RECLAIM FAC? YES <input type="checkbox"/> NO <input type="checkbox"/>		E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		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			