



Section I – South Coast AQMD LAER/BACT Determination

Source Type: **Major/LAER**
 Application No.: **615085**
 Equipment Category: **Boiler < 20 MMBTU/HR**
 Equipment Subcategory: **Fire-tube, Natural Gas Fired**
 Date: **September 2, 2022**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Williams and Davis	B. MODEL: WDNP2-G-840	
C. DESCRIPTION: Boiler, Fire-tube Type, with a Low NOx Burner		
D. FUNCTION: Mizkan America, Inc. manufacturers a variety of vinegars (5 – 15% acetic acid). The facility has inactivated two of their older 3.985 MMBtu/hr boilers from service and has replaced them with this larger one. This boiler is currently used to produce steam to heat up their process water.		
E. SIZE/DIMENSIONS/CAPACITY: 8.4 MMBtu/hr		
COMBUSTION SOURCES		
F. MAXIMUM HEAT INPUT: 8.4 MMBTU/hr		
G. BURNER INFORMATION:		
TYPE	INDIVIDUAL HEAT INPUT	NUMBER
Low NOx Burner	8.4 MMBtu/hr	one
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: Boiler with 10 HP Combustion Air Blower. Per Rule 1146, this boiler is considered a Group III Unit (5 MMBtu/hr – 20 MMBtu/hr) boiler.		

2. COMPANY INFORMATION

A. COMPANY: Mizkan America, Inc.	B. FAC ID: 39855
C. ADDRESS: 10037 E. 8th Street CITY: Rancho Cucamonga STATE: CA ZIP: 91730	D. NAICS CODE: 2099
E. CONTACT PERSON: Wayne Musselman	F. TITLE: Maintenance Manager
G. PHONE NO.: 909-989-4211	H. EMAIL: Wayne.Musselman@mizkan.com

3. PERMIT INFORMATION

A. AGENCY: South Coast AQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Christopher Gill	
D. PERMIT INFORMATION:	PC ISSUANCE DATE: N/A (PO no PC)
P/O NO.: G61375	PO ISSUANCE DATE: 4/21/2020
E. START-UP DATE: 2020	
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 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		7 PPMV	*	50 PPMV	*	
Averaging Time		15 MIN**		15 MIN**		
Correction		3 % O ₂		3 % O ₂		
B. OTHER BACT REQUIREMENTS:						
* Using Natural Gas						
** Per condition (5)(d), the sampling times shall be at least 15 consecutive minutes for maximum and minimum loads and at least one hour for normal operating load.						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS: This equipment is subject to the applicable NOx requirements of Rule 1146.						

5. CONTROL TECHNOLOGY

A. MANUFACTURER: William and Davis		B. MODEL: WDNP2-G-840	
C. DESCRIPTION: Low NOx burner			
D. SIZE/DIMENSIONS/CAPACITY: 8.4 MMBTU			
E. CONTROL EQUIPMENT PERMIT INFORMATION: See Section 3			
APPLICATION NO.:		PC ISSUANCE DATE: Click here to enter a date.	
PO NO.:		PO ISSUANCE DATE: Click here to enter a date.	
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM ₁₀	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS: N/A			

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source test						
B. DATE(S) OF SOURCE TEST: September 5, 2020						
C. COLLECTION EFFICIENCY METHOD: N/A						
D. COLLECTION EFFICIENCY PARAMETERS: N/A						
E. SOURCE TEST/PERFORMANCE DATA:						
Parameter	Units	Minimum	Average	Maximum	Limit	Rule/Regulation
NO _x	ppm @ 3% O ₂	3.75	5.04	5.70	7	Condition 10
	lb/hr	0.0165	0.0347	0.0507		
CO	ppm @ 3% O ₂	0.566	0.187	0.0	50	
	lb/hr	0.00152	0.000783	0.0		
O ₂	%	9.02	8.27	8.03		
F. TEST OPERATING PARAMETERS AND CONDITIONS: The boiler was tested at three loads: minimum, average, and maximum.						
G. TEST METHODS (SPECIFY AGENCY): SCAQMD 100.1 for NO _x , CO, O ₂ and CO ₂ .						

<p>H. MONITORING AND TESTING REQUIREMENTS:</p> <p>Condition (5) The owner or operator of this equipment shall conduct an initial source test and subsequent source test every five years.</p> <p>Condition (7) The operator shall conduct periodic monitoring of NOx and CO emissions pursuant to the schedule in Rule 1146 with a portable NOx, CO and Oxygen analyzer according to the Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Units Subject to South Coast AQMD Rule 1146.</p>
<p>I. DEMONSTRATION OF COMPLIANCE COMMENTS: Unit has shown compliance from source test.</p>

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7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 011003	B. CCAT: 81	C. APPLICATION TYPE CODE: 30	
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): PR 20291	
G. SCAQMD SOURCE SPECIFIC RULES: Rule 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.