Louisville Metro Air Pollution Control District

850 Barret Ave., Louisville, Kentucky 40204

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Statement of Basis

Company: Mizkan Americas Inc.

Plant Location: 3290 South Seventh Road, Louisville, Kentucky 40216

Date Application Received: 01/03/2011 **Application Number:** 12867

Date of Draft Permit: 12/06/2014 **Date of Public Comment:** 12/06/2014

District Engineer: Shannon Hosey **Permit No:** O-0461-14-F

Plant ID: 0461 **SIC Code:** 2084/2099 **NAICS**: 312130/311941 **AFS:** 0461

Introduction:

This permit will be issued pursuant to District Regulation 2.17- *Federally Enforceable District Origin Operating Permits*. Its purpose is to limit the plant wide potential emission rates from this source to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO_2), carbon monoxide (CO), 1 hr and 8 hr ozone (O_3), and particulate matter less than 10 microns (PM_{10}); and is a non-attainment area for particulate matter less than 2.5 microns ($PM_{2.5}$) and partial non-attainment area for sulfur dioxide (SO_2).

Application Type/Permit Activity:

[ ] Initial Issuance
[ ] Permit Revision
  [ ] Administrative
  [ ] Minor
  [ ] Significant
[X] Permit Renewal
[ ] Construction

Compliance Summary:

[X] Compliance certification signed [ ] Compliance schedule included
[ ] Source is out of compliance [X] Source is operating in compliance

I. Source Information

1. Plant-wide Product/Process Description: Wine and vinegar production plant.

2. Process Description: Fermentation tanks, processing, storage, handling and loading facility for wine production. Vinegar production including acetators, storage tanks and loading facility.

3. Site Determination: There are no other facilities that are contiguous or adjacent to this facility.

4. Emission Unit Summary:

Emission Unit	Equipment Description
U1	Wine Fermentation, Wine Processing/Fortifying and Wine Generators
U2	Wine Storage Tanks, Ethanol Tanks and Vinegar Storage Tanks
U3	Wine Loading and Vinegar Loading into Rail Cars or Truck Tankers

5. Fugitive Sources: There are no fugitive source emissions at this facility.

6. Permit Revisions:

Permit No.	Issue Date	Public Notice Date	Type	Attachment No./ Page No.	Description
59-97-F	05/30/2003	04/13/2003	Initial	Entire Permit	Initial Permit Issuance
4/22/1997	04/04/2000	03/05/2000	Administrative	General Conditions Pages 2-4	Incorporate revisions to General Conditions #4, #11, #12, and #13; New General Conditions #13 and #14
59-97-F (R2)	03/31/2006	12/04/2005	Significant	Entire Permit	Scheduled Permit Renewal
O-0461-14-F	xx/xx/20xx	12/06/2014	Renewal	Entire Permit	Permit Renewal

7. Plant-wide Emission Summary:

Pollutant	District Calculated Actual Emissions 2009 Data (tpy)	Major Source Status (based on PTE)
CO	0	No
NO_X	0	No
SO_2	0	No
PM/PM_{10}	0	No
VOC	18.70	Yes
Single HAP Acetaldehyde	0.003	No
Total HAPs	0.130	No

8. Applicable Requirements:

[ ] PSD [X] 40 CFR 60 [X] SIP
[ ] NSR [ ] 40 CFR 61 [X] District-Origin
[X] 40 CFR 63 [ ] Other

9. MACT Requirements: The source has no future MACT requirements.

10. Referenced Federal Regulations in Permit:

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)

40 CFR 60, Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

11. Non-applicable Regulation: 40 CFR 60 Subpart NNN - Standards of Performance for Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations does not apply because Mizkan Americas produce beverage alcohols.

II. Regulatory Analysis

1. Acid Rain Requirements: The source is not subject to the Acid Rain Program.

2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

3. Prevention of Accidental Releases 112(r): The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, *Chemical Accident Prevention Provisions*, in a quantity in excess of the corresponding specified threshold amount.

4. Basis of Regulation Applicability

a. **Plant-wide:**

The source is a potential major source for the pollutant VOC. *Regulation 2.17 – Federally Enforceable District Origin Operating Permits* establishes requirements to limit the plant-wide potential emission rates to below major source threshold levels and to provide methods of determining continued compliance with all applicable requirements. Per Regulation 2.17, section 5.1, plant-wide VOC emissions are limited to 100 tons during any consecutive 12-month period.

Regulation 2.17, section 5.2, requires monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the district upon request.

Regulation 2.17, section 7.2, requires stationary sources for which a FEDOOP is issued shall submit an Annual Compliance Certification by April 15, of the following calendar year. In addition, as required by Regulation 2.17, section 5.2, the source shall submit an Annual Compliance Report to show compliance with the permit, by March 1 of the following calendar year. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.17, section 3.5.

b. **STAR Program**

Regulations 5.00, 5.01, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.

c. **Applicable Regulations:**

Regulation	Title	Type
2.17	Federally Enforceable District Origin Operating Permits	SIP
7.12	Standards of Performance for New Storage Vessels for Volatile Organic Compounds	SIP

Regulation	Title	Type
7.22	Standard of Performance for New Volatile Organic Materials Loading Facilities	SIP
7.25	Standards of Performance for Existing Process Operations	SIP
40 CFR 60 Subpart Kb	Federal New Source Performance Standards for VOC Liquid Storage Vessels	Federal
40 CFR 60, Subpart VV	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	Federal
40 CFR 63, Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Federal

d. **Basis for Regulation Applicability:**

Regulation	Basis for Applicability
2.17	This regulation applies to any stationary source, or one or more processes or process equipment at a stationary source, for which the owner or operator voluntarily applies for a federally enforceable District origin operating permit.
7.12	Applies to storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972.
7.22	Applies to each loading facility which loads more than 200 gallons in any one day of volatile organic materials into tank trucks, trailers, or railroad tank cars commencing on or after the effective date of this regulation.
7.25	Establishes the requirements for VOC emissions, apply to a process not elsewhere regulated in District Regulation 7, and apply to new processes commenced after June 13, 1979
40 CFR 60 Subpart Kb	Applies if you own or operate a affected facilities to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
40 CFR 60, Subpart VV	Applies if you own or operate a affected facilities in the synthetic organic chemicals manufacturing industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 The fermenters produce beverage alcohol, and the acetators have a design capacity of less than 1,102 tons acetic acid per year.
40 CFR 63, Subpart ZZZZ	Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.

e. **Emission Unit U1 – Wine Fermentation, Wine Processing/Fortifying and Wine Generators**

i. **Equipment:**

Emission Point	Description Make/Model	Applicable Regulation	Control Device
E1	32,985 Gallon Wine Fermenter #1	7.25 and 40 CFR 60, Subpart VV	N/A
E2	32,985 Gallon Wine Fermenter #2		
E3	32,985 Gallon Wine Fermenter #3		
E4	32,985 Gallon Wine Fermenter #4		
E5	32,985 Gallon Wine Fermenter #5		
E14	12,408 Gallon Wine Fermenter #14 (1994)		
E18	10,640 Gallon Wine Fermenter #18 (1994)		
E6	32,985 Gallon Wine Processing Tank #6	7.25	
E7	32,985 Gallon Wine Processing Tank #7		
E8	12,408 Gallon Wine Processing Tank #8 (1994)		
E9	12,408 Gallon Wine Processing Tank #9 (1994)		
E10	6,000 Gallon Wine Processing Tank #10 (1994)		
E11	6,131 Gallon Wine Processing Tank #11 (1994)		
E12	12,483 Gallon Wine Processing Tank #12 (1994)		
E13	12,408 Gallon Wine Processing Tank #13 (1994)		
E15	12,408 Gallon Wine Processing Tank #15 (1994)		
E16	12,483 Gallon Wine Processing Tank #16 (1994)		
E17	12,408 Gallon Wine Processing Tank #17 (1994)		
E23	61,803 Gallon Wine Processing Tank #23 (1994)		
E24	3,252 Gallon Wine Processing Tank #24 (1994)		
E25	14,784 Gallon Wine Processing Tank #25 (2000)		
E26	6,944 Gallon Wine Processing Tank #26 (2000)		
E27	6,953 Gallon Wine Processing Tank #27 (2000)		
E28	6,949 Gallon Wine Processing Tank #28 (2000)		
E29	6,257 Gallon Wine Processing Tank #29 (2000)		
E30	6,937 Gallon Wine Processing Tank #30 (2000)		
E31	12,236 Gallon Wine Processing Tank #31 (2000)		
E32	12,236 Gallon Wine Processing Tank #32 (2000)		
E33	12,774 Gallon Wine Processing Tank #33 (2000)		
E34	12,774 Gallon Wine Processing Tank #34 (2000)		

Emission Point	Description Make/Model	Applicable Regulation	Control Device
E35	12,774 Gallon Wine Processing Tank #35 (2000)		
E36	12,774 Gallon Wine Processing Tank #36 (2000)		
V11	17,000 Gallon Wine Processing Tank #V11 (1994)		
V12	17,000 Gallon Wine Processing Tank #V12 (1994)		
V13	17,000 Gallon Wine Processing Tank #V13 (1994)		
V14	17,000 Gallon Wine Processing Tank #V14 (1994)		
800/1	8000 Gallon Vinegar Generator #800/1 with One-Stage Process Condenser (acetator production capacity less than 1,102 tons acetic acid per year) (1994)	7.25 and 40 CFR 60, Subpart VV	C1
1200/1	12,000 Gallon Vinegar Generator #1200/1 with One-Stage Process Condenser (acetator production capacity less than 1,102 tons acetic acid per year) (1994)		
1200/2	12,000 Gallon Vinegar Generator #1200/2 with One-Stage Process Condenser (acetator production capacity less than 1,102 tons acetic acid per year) (1994)		
800/2	8000 Gallon Vinegar Generator #800/2 with One-Stage Process Condenser (acetator production capacity less than 1,102 tons acetic acid per year) (1994)	7.25 and 40 CFR 60, Subpart VV	C2

ii. **Control Devices**

Control Device ID	Description Make/Model	Pollutant Controlled
C1	Wet Scrubber A	VOC
C2	Wet Scrubber B	

iii. **Standards/Operating Limits**

1) **VOC**

(a) Regulation 2.17, section 5.1, allows the source to set a synthetic limit below the major source threshold. The source has requested a synthetic limit of less than 100 tons per of the pollutant VOC in a 12 consecutive month period.

(b) Per Regulation 7.25, for Emission Processes E1, E2, E3, E4, E5, E14 and E18, the owner or operator shall limit the VOC emissions to less than 3.4 ton per 12 consecutive month period. (BACT)

(c) Per Regulation 7.25, for Emission Processes E6, E7, E8, E9, E10, E11, E12, E13, E15, E16, E17, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, V11, V12, V13 and V14, the owner or operator shall limit the VOC emissions to less than 11.75 ton per 12 consecutive month period. (BACT)

(d) Per Regulation 7.25, for Emission Processes 800/1, 1200/1, 800/2 and 1200/2, the owner or operator shall limit the VOC emissions to less than 9.30 ton per 12 consecutive month period. (BACT)

(e) The source is subject to 40 CFR Part 60 Subpart VV of Regulation 7.02, section 3.59, as applicable.

f. **Emission Unit U2 – Wine Storage Tanks, Ethanol Tanks and Vinegar Storage Tanks**

i. **Equipment:**

Emission Process	Description Make/Model	Applicable Regulation	Control Device
E20	30,300 Gallon Wine Storage Tank #20 (1995)	7.12	N/A
E21	30,300 Gallon Wine Storage Tank #21 (1995)		
E22	30,300 Gallon Wine Storage Tank #22 (1995)		
E37	25,444 Gallon Wine Storage Tank #37 (2000)		
E38	25,444 Gallon Wine Storage Tank #38 (2000)		
E39	25,444 Gallon Wine Storage Tank #39 (2000)		
W46	64,335 Gallon Wine Storage Tank #W46 (2000)		
W47	64,335 Gallon Wine Storage Tank #W47 (2000)		
E48	64,335 Gallon Wine Storage Tank #48 (2000)		
E40	64,335 Gallon Ethanol Tank #40 (2000)		
E41	53,984 Gallon Ethanol Tank #41 (1983)		
E42	20,453 Gallon Ethanol Tank #42 (1983)		
E43	39,930 Gallon Ethanol Tank #43 (1983)		
E44	13,286 Gallon Ethanol Tank #44 (1994)		
E45a	3,120 Gallon Ethanol Tank #45a (1994)		
E45	13,320 Gallon Ethanol Tank #45 (1994)		
E46	13,320 Gallon Ethanol Tank #46 (1994)		
E47	13,320 Gallon Ethanol Tank #47 (1994)		

Emission Process	Description Make/Model	Applicable Regulation	Control Device
V1	7,000 Gallon Vinegar Storage Tank #V1 (1994)		
V2	7,000 Gallon Vinegar Storage Tank #V2 (1994)		
V3	10,000 Gallon Vinegar Storage Tank #V3 (1994)		
V4	10,000 Gallon Vinegar Storage Tank #V4 (1994)		
V5	10,000 Gallon Vinegar Storage Tank #V5 (1994)		
V6	17,180 Gallon Vinegar Storage Tank #V6 (1994)		
V7	17,180 Gallon Vinegar Storage Tank #V7 (1994)		
V8	17,180 Gallon Vinegar Storage Tank #V8 (1994)		
V9	17,180 Gallon Vinegar Storage Tank #V9 (1994)		
V10	17,180 Gallon Vinegar Storage Tank #V10 (1994)		
V15	61,535 Gallon Vinegar Storage Tank #V15 (1994)	7.12 and 40 CFR 60 Subpart Kb	
V16	61,535 Gallon Vinegar Storage Tank #V16 (1994)		
V17	20,006 Gallon Vinegar Storage Tank #V17 (1997)		
V18	20,006 Gallon Vinegar Storage Tank #V18 (1997)		
V19	19,886 Gallon Vinegar Storage Tank #V19 (1997)		
V20	27,925 Gallon Vinegar Storage Tank #V20 (1994)		
V21	27,925 Gallon Vinegar Storage Tank #V21 (1994)		
V22	61,535 Gallon Vinegar Storage Tank #V22 (1997)		
V23	36,473 Gallon Vinegar Storage Tank #V23 (1995)		
V24	36,473 Gallon Vinegar Storage Tank #V24 (1995)		
V25	42,632 Gallon Vinegar Storage Tank #V25 (1983)		
V26	42,632 Gallon Vinegar Storage Tank #V26 (1983)		
V27	14,000 Gallon Vinegar Storage Tank #V27 (2000)		
V28	14,000 Gallon Vinegar Storage Tank #V28 (2000)		

ii. **Standards/Operating Limits**

1) **VOC**

(a) Regulation 2.17, section 5.1, allows the source to set a synthetic limit below the major source threshold. The source has requested a synthetic limit of less than 100 tons per of the pollutant VOC in a 12 consecutive month period.

(b) Regulation 7.12 section 3.3 requires submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater. For Storage vessel subject to the

requirements of Regulation 7.12, the regulation applies due to the size of the tanks. The as-stored vapor pressure is less than 1.5 psia; therefore, no emission or equipment standards are applicable. The vapor pressure of vinegar (10% acetic acid) is 0.01 psia and the vapor pressure of fortified wine (20% alcohol) is 0.104 psia.

(c) The source is subject to 40 CFR Part 60 Subpart Kb of Regulation 7.02, section 3.24 as applicable. 40 CFR Part 60, Subpart Kb, does not apply to storage vessels used to store beverage alcohol.

g. **Emission Unit U3 – Wine Loading and Vinegar Loading into Rail Cars or Truck Tankers**

i. **Equipment:**

Emission Process	Description Make/Model	Applicable Regulation	Control Device
TL1	Truck Loading	7.22	N/A
RL1	Rail Car Loading		
DTL1	Drum/Tote Loading		

ii. **Standards/Operating Limits**

1) **VOC**

(a) Regulation 2.17, section 5.1, allows the source to set a synthetic limit below the major source threshold. The source has requested a synthetic limit of less than 100 tons per of the pollutant VOC in a 12 consecutive month period.

(b) Regulation 7.22 stipulates use of controls for facilities loading 20,000 gallons or more of volatile organic material.

h. **Emission Unit IA1 – Emergency Generator**

i. **Equipment:**

Emission Process	Description Make/Model	Applicable Regulation	Control Device
EG	Diesel-fired (RICE) Emergency Generator	40 CFR 63, Subpart ZZZZ	N/A

i. **Standards/Operating Limits**

1) **HAP**

Federal Regulation 40 CFR 63 Subpart ZZZZ stipulates conditions for the operation of emergency engines.

ii. **Monitoring and Record Keeping/Reporting**

1) **HAP**

Federal Regulation 40 CFR 63 Subpart ZZZZ stipulates monitoring and record keeping and reporting for the operation of emergency engines.

III. Other Requirements

1. Temporary Sources: The source did not request to operate any temporary facilities.

2. Short Term Activities: The source did not report any short term activities.

3. Emissions Trading: N/A

4. Operational Flexibility: The source did not request any operational flexibility for these emission points.

5. Compliance Status:

Incid. #	Date	Regulation Violated	Result
04495	05/23/11	Company exceeded the 9.3 tpy limit 47 times between 7/2000 through 12/2005 and also is not keeping records.	Letter
05898	07/18/12	Company was not monitoring, recording, and reporting the correct temperature.	Letter

6. Calculation Methodology or Other Approved Method:

The VOC emission from wine processing are modeled using the methods described in AP42, Chapter 5.2. The VOC storage tanks emissions are based upon the throughputs being entered into the TANKS emission modeling program.

7. Permit Fee: The permit fee of $508.48 is based on the *Schedule of Fees* table for Fiscal Year 2015, pursuant to Regulation 2.08. (NESHAP Review)

8. Insignificant Activities:

Description	Quantity	Basis
Natural Gas Boiler < 10 MMBTU/hr	1	Regulation 1.02, Appendix A, section 1.1
Brazing, soldering or welding	1	Regulation 1.02, Appendix A,

Description	Quantity	Basis
equipment		section 3.4
Containers, reservoirs, or tanks used exclusively for: Storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mm Hg at conditions of 20° C and 760 mm of Hg,	1	Regulation 1.02, Appendix A, section 3.9.2
Internal combustion engines, whether fixed or mobile, and vehicles used for transport of passengers or freight, except as may be provided for in subsequent regulations	4	Regulation 1.02, Appendix A, section 2

1) Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements.

2) Insignificant activities identified in District Regulation 1.02, Appendix A, shall comply with generally applicable requirements.

3) Activities identified in Regulation 1.02, Appendix A, may not require a permit and by insignificant with regard to application disclosure requirement but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.

4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.

5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment.

6) The owner or operator shall annually submit an updated list of insignificant activities, including an identification of the additions and removals of insignificant activities that occurred during the preceding year, with the compliance certification due April 15th.