

TECHNICAL SUPPORT DOCUMENT

I. GENERAL COMMENTS:

A. Company Information

1. Kalil Bottling Co
 2. Physical Address: 931 S Highland Avenue
Tucson, Arizona 85719
- Mailing Address: (As physical address)

B. Background

Kalil Bottling Co first applied for an air quality permit in the early 1970's and is currently operating under a 5-year with an expiration date of July 25, 2005. Following a permit call letter issued in July 2004, the source submitted an application dated on March 8, 2005 with supplemental information received March 25, 2005. This Technical Support Document addresses the second renewal of the five-year permit.

Past enforcement actions worth noting include:

- July 2003: Failure to notify the control officer of a facility change. This enforcement action was adequately resolved and subsequently closed in August 2003.
- October 2002: Failure to record and maintain results of testing as detailed in permit. This enforcement action was adequately resolved and subsequently closed in December 2002.
- August 2001: Failure to submit an administrative permit amendment. This enforcement action was adequately resolved and subsequently closed in the same month.
- April 2000: Failure to submit the required annual Compliance Certification form. This enforcement action was adequately resolved and subsequently closed in May 2000.
- March 1999: Failure to notify the Control Officer of a equipment change. This enforcement action was adequately resolved and subsequently closed in May 1999.

C. Attainment Classification

The source is in an area that is in attainment for all pollutants.

II. SOURCE DESCRIPTION

A. Process Description

The source is engaged in bottling and distributing soft drinks. The majority of this activity is conducted 24 hours per day, 7 days a week, 52 weeks a year (8760 hours per year).

Potential emission emitting equipment at the source include various capacity natural gas fired boilers and an enclosed paint spray booth.

B. Air Pollution Control Equipment

All spray-coating operations are undertaken within an enclosure (paint spray booth) and emissions are controlled by drawing air through filters.

III. REGULATORY HISTORY

A. Testing & Inspections

Kalil Bottling Co has been permitted since 1970 and has had regular inspections to date. The last inspection was undertaken on June 19, 2003.

B. Excess Emissions

None reported and none recorded

IV. EMISSIONS ESTIMATES

The following emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in Part “B” of the air quality permit # 251.

Pollutant	Tons per Year
Nitrogen Oxides (NO _x)	5.32
Carbon Monoxide (CO)	4.47
Volatile Organic Compounds (VOC)	0.38
Particulate Matter (as PM ₁₀)	0.40
Sulfur Oxides (SO _x)	0.80
Hazardous Air Pollutants (HAPs) - Aggregate	0.02

Based on these estimates, this facility is a **True Minor Source** for all criteria pollutants. Estimates are based on 8760 hours of operation per year. Refer to the PTE documents for calculations.

V. APPLICABLE REQUIREMENTS

This is an existing Class II *true minor* stationary source. The potential to emit emissions are below Pima County Code permit threshold requirements, however since the source operates a boiler (equipment ID AUX 015) incorporated after June 9, 1989, with a capacity >10 million Btu/hour; the source is subject to New Source Performance Standards Part 60, Subpart Dc.

NSPS The following NSPS rule applies to the source:

40 CFR Part 60 Subpart Dc: Standards of Performance for Small Industrial – Commercial - Institutional Steam Generating Units

NESHAP No NESHAP rules apply to the source.

SIP The following SIP rules apply: SIP rules 321 343 & 344.

PCC The following PCC rules apply:

17.12.180, 17.12.190, 17.12.210, 17.12.320, 17.12.350, 17.16.010, 17.16.030, 17.16.040, 17.16.050, 17.16.130, 17.16.165, 17.16.400, 17.16.430, 17.16.490.A.12 and 17.20.010

The following PCC does not apply as:

17.12.140 – Applicability; classes of permits

The requirements for a Class II permit applies to those facilities operating fuel-burning equipment which, at a location or property other than a one or two family residence, are fired at a sustained rate of more than one million BTU per hour for more than an eight hour period. Kalil Bottling Co does not operate any fuel burning equipment that satisfies this rule. Kalil Bottling Co is however subject to NSPS regulations, consequently the source will be issued a **CLASS II** permit.

VI. PERMIT CONTENTS

A. Emission Limits/ Standards:

NSPS Effected Facilities: (Miura Steam Boiler)

Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units	40 CFR Part 60, Subpart Dc
Opacity Standard	SIP 321, 17.16.040
Fuel Limitation	17.12.180.A.2, 17.12.190.B, 17.12.350

Fossil Fuel Fired Industrial and Commercial Equipment

Particulate Matter Standard	17.16.165.C.1
Visibility Limiting Standard	SIP 321, 17.16.130.B
Visible Emissions	SIP 343, 17.16.050.D
Fuel Limitation	17.12.180.A.2, 17.12.190.B, 17.12.350

Surface Coating (Paint Spraying)

Operational Limitation	17.16.400.C.1
Volatile Organic Compounds (VOC) Limitation	17.16.400, 17.16.400.C.3, 17.16.400.C.6, 17.16.400.C.7
Miscellaneous Metal Parts	17.16.400.C.5.b, 17.16.400.C.7

General Standards

Volatile Organic Compounds Limitation (VOC)	17.16.400
Visibility Limiting Standard	SIP 343, 17.16.050.D
Odor Limiting Standard	SIP 344.A, 17.16.030

B. Monitoring Requirements:

NSPS Effected Facilities: (Miura Steam Boiler)

Daily amounts of the fuel combusted

40 CFR 60.48c(g)

Federal New Source Performance Standards require the Permittee to record and maintain records of the amount of fuel combusted during each day. [Pursuant to 40 CFR 60.48c(g)]

Various Environment Protection Agency (EPA) ‘Applicability Determination Index’ documents are available detailing the EPA’s position to allow changes to the daily fuel usage recordkeeping and reporting frequency under Subpart Dc for boilers fired with only natural gas. EPA’s reasoning has been that it is unnecessary to keep daily fuel usage records since none of the emission standards in Subpart Dc apply to units fired with natural gas. As such, Kalil Bottling Co., shall be exempt from monitoring the daily fuel use in the natural gas fired Miura Boiler. Kalil Bottling Co is however required to keep separate records of the amount of natural gas burned in the NSPS Miura Boiler. [Reference: EPA Applicability Determination Index, Determination Detail Control, Number 0300118] also [030018 0300114, 0300113, 0400002, 0300108, 0300103, 0300107, 0300102, 0200005, 0100050 and 0400020].

Note: If the Miura steam boiler shares a common fuel system with other units, the Permittee shall propose an acceptable way of apportioning this total fuel usage in order to determine the amount of natural gas used in the Miura boiler. This may be based upon combined monthly fuel consumption and relevant operating times and parameters, such as boiler output or design heat input capacity for each unit, or by dividing each boilers design heat input capacity by the total of the design heat input capacities of all the boilers, and then using this quantity to prorate the natural gas usage for each boiler on a monthly basis.] [Reference: EPA Applicability Determination Index, Determination Detail Control, Number 0300118].

Determination of the amount of fuel combusted

EPA Determination Detail Control Number 0300118

Demonstrate that only commercially available pipeline quality gas was fired.

17.12.190 & 17.12.180.A.3 & 4

Fossil Fuel Fired Industrial and Commercial Equipment

Demonstrate that only commercially available pipeline quality gas was fired.

17.12.190 & 17.12.180.A.3 & 4

Surface Coating (Paint Spraying)

Demonstrate that the VOC emission limitation on the surface coating operations is not exceeded.

17.12.180.A.3

General Requirements

Demonstrate compliance with opacity standard using EPA Test Method 9.

17.16.040

C. Recordkeeping Requirements

NSPS Effected Facilities: (Miura Steam Boiler)

Retention of fuel combustion records

40CFR60.48c(i) &

EPA Determination Detail Control Number 0300118

Fossil Fuel Fired Industrial and Commercial Equipment

See General Standards in ‘D’ of this part

Surface Coating (Paint Spraying)

Records of VOC emissions from the surface coating operations. 17.12.180.A.4

General Requirements

Permit Posting and Retention of Records 17.12.080 and 17.12.180.A.4
Location of Records 17.12.180.A.4

D. Reporting Requirements:

NSPS Effected Facilities: (Miura Steam Boiler)

Date of construction or re-construction notification 40 CFR 60.48c(a)
Date of anticipated start-up 40 CFR 60.48c (a)
Date of actual start-up 40 CFR 60.48c (a)
Design heat input capacity 40 CFR 60.48c(a)(1)
Annual capacity factor 40 CFR 60.48c(a)(3) & 40 CFR 60.41c

All Operations

Excess emissions and permit deviation reporting 17.12.180.A.5.b & 17.12.180.E.3.d
Semiannual summary reports of required monitoring 17.12.180.A.5.a
Compliance certification reporting 17.12.220.A.2
Emissions inventory reporting 17.12.320

E. Testing Requirements:

Compliance with Particulate Matter Standard 17.16.165.C.1
Compliance with Opacity Standard 17.12.180.A.3
Compliance with Fuel Sulfur Content 17.12.180.A.3
Approved alternative test method 17.12.045.D

F. Alternate Operating Scenarios:

The applicant has not requested any alternate operating scenarios

G. Miscellaneous Comments:

- Only equipment identification (AUX015) is subject to NSPS 40 CFR 60.40c.;
- NSPS SO₂ standard not applicable as the facility combusts only natural gas. [40 CFR 60.42c(j)];
- PM₁₀ standard is not applicable for the same reason;
- No performance tests required, as the boiler is not subject to (a) through (j) of 40 CFR 60.44c;
- Pursuant to 40 CFR 60.48c(g), the source is required to maintain records of the amounts of fuel combusted during each day, however see exclusion to this rule detailed in Part B of this TSD;
- The Permittee is not required to log the coating type used in the coating application system when less than 3.5 pounds per gallon of VOC compounds are emitted through the coating application system;
- In order to provide the public with a consistent interpretation of the Pima County Codes, and ensure the safety of PDEQ staff, the Permittee shall follow the PDEQ departmental protocol regarding the paint overspray, identified as such in PDEQ Technical Procedure, TECH-202: Controlling Overspray In Paint Spray Operations.

VII. IMPACTS TO AMBIENT AIR QUALITY

Not a major source thus no studies are required.

VIII. CONTROL TECHNOLOGY DETERMINATION

No control technologies needed to be determined. This is a soft drink bottling and distribution plant operating as a true minor stationary source.

IX PREVIOUS PERMIT CONDITIONS

No previous permit conditions that need to be included in this permit.