PERMIT # 3221

TECHNICAL SUPPORT DOCUMENT

I. GENERAL COMMENTS:

A. Company Information

1. Arizona Canning Company, LLC

2. Physical Address: 8755 South Rita Road
Tucson, Arizona 85747

Mailing Address: (Same as physical address)

B. Background

No background, Arizona Canning Company, LLC is a new source. This Technical Support Document addresses the first five-year permit.

C. Attainment Classification

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

II. SOURCE DESCRIPTION

A. Process Description

The facility is a food (bean) canning plant that processes whole and refried beans.

Emission emitting equipment at the source include a 425 brake horsepower emergency generator set and two boilers, with a capacity >10 million Btu/hour each.

The air permit application identifies a Detriot Diesel Corporation engine (Model 6063TK35) used in conjunction with the above emergency generator. PDEQ does not consider the operation of this unit as an emission source. The Detroit Diesel engine is used to 'kick start' the emergency generator and is only operational for a brief period of time.

Pursuant to PCC 17.04.340.A.113.h, the operation of the Fire Pump Driver (Clark USA, Model JU6H-UF50) identified in the application is an insignificant activity.

B. Air Pollution Control Equipment

None

III. REGULATORY HISTORY

A. Testing & Inspections

None. Arizona Canning Company, LLC is a new source.

B. Excess Emissions

None. Arizona Canning Company, LLC is a new source

IV. EMISSIONS ESTIMATES

Facilities subject to NSPS: Performance for Small Industrial-Commercial-Institutional Steam Generating Units:

The potential to emit calculations submitted by the source as presented on Emissions Sources Forms (11A and 11B) in the June 2006 air quality application are incorrect. The source has inadvertently presented the actual emissions based on annual Therms used. The potential to emit calculations of a stationary source are required to be based on maximum capacity under it's physical and operational design. The determination of the potential to emit emissions are presented below:

The emission factors for the Cleaver Brooks boilers are derived from manufacturer published data, identified as such in the permit application, section "Equipment Information".

$$Potential\ To\ Emit\left[\frac{Tons}{yr}\right] = Emission\ Factor\left[\frac{Lb}{MMBtu}\right] \times Maximum\ rated\ capacity\ [MMBtu] \times Operational\ Hours\ \left[\frac{hrs}{yr}\right] \times Conversion\left(\frac{Tons}{Lb}\right)$$

The following potential to emit emissions represent the emissions from **each** Cleaver Brooks boiler.

NO_X = 0.12 (lb/MMBtu) x 29.29 (MMBtu) x 8760 (hrs/yr) x 1/200 (Ton/Lb) = 15.39 Tons/yr
SO_X = 0.001 (lb/MMBtu) x 29.29 (MMBtu) x 8760 (hrs/yr) x 1/200 (Ton/Lb) = 0.13 Tons/yr
CO = 0.15 (lb/MMBtu) x 29.29 (MMBtu) x 8760 (hrs/yr) x 1/200 (Ton/Lb) = 19.24 Tons/yr
VOC = 0.016 (lb/MMBtu) x 29.29 (MMBtu) x 8760 (hrs/yr) x 1/200 (Ton/Lb) = 2.05 Tons/yr
PM_{10} = 0.01 (lb/MMBtu) x 29.29 (MMBtu) x 8760 (hrs/yr) x 1/200 (Ton/Lb) = 1.28 Tons/yr

Standards of Performance for Stationary Rotating Machinery:

The potential to emit calculations for the generator set (submitted by the source in the August 2006 air quality application amendment) were verified. For reference, the potential to emit emissions are presented in Table 1 below.

Table 1: Generator Set - Uncontrolled Potential To Emit (Tons/yr)

Emergency Generator	Uncontrolled Potential To Emit (Tons/yr)					
	NO_X	SO_X	CO	VOC	PM_{10}	HAP_S
Kohler Co 250REOZD	57.71	3.82	12.43	4.65	4.10	0.08

Facility Wide Emissions:

The following emission rates (Table 2) are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in the Specific Conditions of the air quality permit #3221.

Table 2 : Facility Wide-Total Uncontrolled Potential To Emit (Tons/yr)

Source	Uncontrolled Potential To Emit (Tons/yr)					
	NO_X	SO_X	CO	VOC	PM_{10}	HAP_S
Boilers and Emergency Generator Set	88.49	4.08	50.91	8.75	6.66	0.08

V. APPLICABLE REQUIREMENTS

This is a new Class II *true minor* stationary source for all pollutants.

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.

PCC The following PCC rules apply:

17.16.010, 17.16.040, 17.16.130, 17.16.340, 17.16.490.A.12 and 17.20.010.

VI. PERMIT CONTENTS

A. Emission Limits/ Standards:

NSPS Equipment: (Cleaver Brooks Boilers):

Opacity Standard	17.16.040.A
Fuel Limitation (Natural Gas Only)	17.12.185.A.2

Standards of Performance for Stationary Rotating Machinery:

Opacity Standard	17.16.340.E, 17.16.040
Fuel Limitation (Diesel Only)	17.12.185.A.2

B. Monitoring Requirements:

NSPS Equipment: (Cleaver Brooks Boilers):

Quarterly check of visible emissions from the exhaust stack.

Daily amounts of the fuel combusted. 40 CFR 60.48c(g)

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

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, Arizona Canning Company shall be exempt from monitoring the daily fuel use in the natural gas fired Cleaver Brooks Boilers. Arizona Canning Company is however required to keep separate records of the amount of natural gas burned in the NSPS Cleaver Brooks Boilers. [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 Cleaver Brooks Boilers share 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 each 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 monthly amount of fuel combusted in each of the Cleaver Brooks Boilers. [EPA Determination Detail Control Number 0300118].

Demonstration that only commercial available pipeline gas is fired in the boilers.

Standards of Performance for Stationary Rotating Machinery:

Quarterly check of visible emissions from the exhaust stack.

C. Recordkeeping Requirements:

NSPS Effected Facilities: (Cleaver Brooks Boilers):

Visible emissions check recording the time of the check, the name of the person conducting the check, the results of the check, and the corrective action taken (if required).

Retention of all records for a period of two years	40 CFR 60.48c(i)
Retention of fuel combustion records	EPA Determination Detail Control Number 0300118

Standards of Performance for Stationary Rotating Machinery:

Visible emissions check recording the time of the check, the name of the person conducting the check, the results of the check, and the corrective action taken (if required).

Maintain the records of fuel supplier specifications which verify the sulfur content of the fuel, piped and/or as delivered.

D. Reporting Requirements:

NSPS Effected Facilities: (Cleaver Brooks Boilers)

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
Annual submittal of required reports to the Control Officer	EPA Determination Detail Control Number 0300118
Annual submittal of fuel combustion records	EPA Determination Detail Control Number 0300118

Stationary Rotating Machinery

Reporting requirements as identified in the additional permit requirements.

E. Testing Requirements:

Methodology of testing to determine compliance	17.20.010
Compliance with the Opacity Standard	
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 the Cleaver Brooks Boilers are subject to NSPS 40 CFR 60.40c;
- NSPS SO_2 standard not applicable as the facility combusts only natural gas. [40 CFR 60.42c(j)];
- PM_{10} 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 referenced in EPA Determination Detail Control Number 0300118.

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 food (bean) canning plant operating as a true minor stationary source.

IX PREVIOUS PERMIT CONDITIONS

None. Arizona Canning Company, LLC is a new source.