

SIP CONSTRUCTION PERMIT AND TITLE V MINOR MODIFICATION APPLICATION REVIEW

Facility Name: **Keebler Company – Sunshine Biscuits, Inc.**
City: Columbus
County: Muscogee
AIRS #: 04-13-215-00050

Application #: TV-14323
Date SIP Application Received: March 03, 2003
Date Title V Application Received: March 03, 2003
Date of Draft Permit: N/A
Permit No: 2052-215-0050-V-02-2

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Introduction

This narrative is being provided to assist the reader in understanding the content of the attached SIP permit to construct and/or draft/proposed operating permit amendment. Complex issues and unusual items are explained herein simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit amendment is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act Amendments of 1990. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Chapter I of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The primary purpose of this permit amendment is to identify state and federal air requirements applicable to the modification/construction to be performed at Keebler Company – Sunshine Biscuits, Inc. and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the draft permit amendment and is presented in the same general order as the permit amendment. It initially describes the facility receiving the permit amendment, the applicable requirements and their significance, and the methods for determining compliance with those applicable requirements. This narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit amendment in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

I. Facility Description

A. Existing Permits

Table 1 below lists the current Title V permit, and all administrative amendments and minor and significant modifications to that permit. Comments are listed in Table 2 below.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Comments	
		Yes	No
2052-215-0050-V-02-1	April 25, 2002	X	
2052-215-0050-V-02-0	January 19, 1999		

Table 2: Comments on Specific Permits

Permit Number	Comments
2052-215-0050-V-02-1	The addition of a new bake oven line, Oven #4.

B. Regulatory Status

1. PSD/NSR

Non-major source under PSD/NSR regulations. The facility has taken restrictions (249 TPY VOC) to remain a minor source for PSD. Facility is not located in a non-attainment area for NO_x.

2. Title V Major Source Status by Pollutant

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes			✓
PM ₁₀	Yes			✓
SO ₂	Yes			✓
VOC	Yes	✓		
NO _x	Yes			✓
CO	Yes			✓
TRS	N/A			

Table 3: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
H ₂ S	N/A			
Individual	N/A			
Total HAPs	N/A			

II. Proposed Modification

A. Description of Modification

Keebler Company – Sunshine Biscuits, Inc. (“Keebler”) wishes to extend an existing yeast-leavened line/oven, (Source Code OV3), by adding a new oven burning natural gas and propane. The addition will increase the rated heat input for OV#3 from 13 MMBtu/hr to 17.8 MMBtu/hr thereby increasing the hourly production rate of yeast-leavened products produced in OV#3 from 2.75 to 4 tons per hour. Also, Keebler Company requested changes to be made to their Facility Name, Parent/Holding Company Name, and facility description. In agreement with the facility, these changes will be deferred to the time of permit renewal.

B. Emissions Change

Table 4: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)	Increase Less Than Minor Mod Threshold (y/n)
PM	Yes	0.16	0.16	N/A
PM ₁₀	Yes	0.14	0.14	N/A
SO ₂	Yes	0.012	0.012	N/A
VOC	Yes	14.35	14.35	N/A
NO _x	Yes	4.41	4.41	N/A
CO	Yes	1.73	1.73	N/A
TRS				
H ₂ S				
Individual				
Total HAPs				

C. PSD/NSR Applicability

Since the facility is “synthetic minor” for PSD, the potential increase in emissions does not constitute a “significant emission increase” for VOC.

III. Facility Wide Requirements

A. Emission and Operating Caps

Keebler Company, Keebler’s Snacks - Columbus Bakery (“Keebler”) will continue to operate under a facility-wide VOC emissions cap of 249 TPY.

B. Applicable Rules and Regulations

Rules and Regulations Assessment - None Applicable

Emission and Operating Standards - None Applicable

C. Compliance Status

The facility is in compliance at this time.

D. Operational Flexibility

Keebler has requested the flexibility to produce yeast-leavened products in any of their four (4) bake lines (Emission Sources OV1, OV2, OV3, and OV4). VOC emissions will still remain under 249 TPY for any twelve-month consecutive period. However, Since Permit Condition 6.2.2 refers to the Emission Unit OV, this modification and the requested operational flexibility do not require any changes to existing permit conditions.

E. Permit Conditions

None applicable.

IV. Regulated Equipment Requirements

A. Brief Process Description

The facility produces yeast-leavened and non-yeast-leavened food products. The product is baked in ovens fired with natural gas and propane as a back-up fuel. Keebler wishes to extend an existing yeast-leavened line/oven, (Source Code OV3), by adding a new oven burning natural gas and propane. The addition will increase the rated heat input for OV#3 from 13 MMBtu/hr to 17.8 MMBtu/hr thereby increasing the hourly production rate of yeast-leavened products produced in OV#3 from 2.75 to 4 tons per hour.

B. Equipment List for the Process

Emission Units			Specific Limitations/Requirements			Air Pollution Control Devices
Emission Groups	ID No.	Description	Applicable Requirements/Standards	Corresponding Permit Conditions	ID No.	Description
OV	OV1	Cookie and Cracker Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3	N/A	N/A
	OV2	Cookie and Cracker Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3	N/A	N/A
	OV3	Cookie and Cracker Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3	N/A	N/A
	OV4	Cookie and Cracker Oven	391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g)	3.4.1, 3.4.2, 3.4.3	N/A	N/A
SL	SL01	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF01	Fabric Filter
	SL02	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF02	Fabric Filter
	SL03	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF03	Fabric Filter
	SL04	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF04	Fabric Filter
	SL05	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF05	Fabric Filter
	SL06	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF06	Fabric Filter
	SL07	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF07	Fabric Filter
	SL08	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF08	Fabric Filter
	SL09	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF09	Fabric Filter
	SL10	Raw Materials Silo	391-3-1-.02(2)(b) 391-3-1-.02(2)(e)	3.4.1, 3.4.2	FF10	Fabric Filter

C. Equipment & Rule Applicability

The permitting engineer will elaborate on the facts stated in Section II. above as follows:

- Emission and Operating Caps – No new emission or operating caps.
- Applicable Rules and Regulations -

Rules and Regulations Assessment:

Georgia Air Quality Rule 391-3-1-.02(2)(b), “Visible Emissions”: No threshold value or effective date for applicability.

Georgia Air Quality Rule 391-3-1-.02(2)(e), “Particulate Emission from Manufacturing Processes”: No threshold value or effective date for applicability.

Georgia Air Quality Rule 391-3-1-.02(2)(g), "Sulfur Dioxide": No threshold value or effective date for applicability.

Emission and Operating Standards:

Georgia Air Quality Rule 391-3-1-.02(2)(b), "Visible Emissions" limits the visible emissions from the baking oven line to forty (40) percent opacity.

Georgia Air Quality Rule 391-3-1-.02(2)(e), "Particulate Emission from Manufacturing Processes" limits the emission of particulate matter from the baking oven line as follows:

$$E = 4.1 P^{0.67}$$

Where,

P = Process input weight rate in tons per hour

E = Emission rate in pounds per hour

Georgia Air Quality Rule 391-3-1-.02(2)(g), "Sulfur Dioxide" limits the sulfur content of fuels fired in the baking oven line to 2.5 percent sulfur, by weight.

D. Compliance Status

The facility is in compliance at this time.

E. Operational Flexibility

Keebler has requested the flexibility to produce yeast-leavened products in any of their four (4) bake lines (Emission Sources OV1, OV2, OV3, and OV4). VOC emissions will still remain under 249 TPY for any twelve-month consecutive period.

F. Permit Conditions

This modification and the requested operational flexibility do not require any changes to existing permit conditions.

V. Testing Requirements (with Associated Record Keeping and Reporting)

- A. Individual Equipment: No testing requirements associated with this addition Emission Source OV3.
- B. Equipment Groups (all subject to the same test requirements): No testing requirements associated with this modification Emission Group OV.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

- A. Individual Equipment:

- a. Specific monitoring requirements – None Applicable.
- b. Record keeping for monitoring – No new recordkeeping requirements.
- c. Reporting for monitoring – No new reporting requirements.

B. Equipment Groups:

- a. Specific monitoring requirements - None Applicable.
- b. Record keeping for monitoring - None Applicable
- c. Reporting for monitoring – None Applicable.

VI. Other Record Keeping and Reporting Requirements

1. Plant wide - No new requirements
2. Individual Equipment – No new requirements
3. Equipment Groups - No new reporting requirements.

VII. Specific Requirements

Discuss any of the following specific requirements as they apply to the modification.

A. Operational Flexibility

- No additional flexibility has been requested. Condition 6.2.2 of the existing operating permit is written to include all emission sources that are contained within the emission unit OV, thus providing the flexibility to produce yeast or non-yeast-leavened products in any of the four (4) emission sources OV1, OV2, OV3, or OV4.

B. Alternative Requirements

- None Applicable

- C. Insignificant Activities
 - None Applicable
- D. Temporary Sources
 - None Applicable
- E. Short-Term Activities
 - None Applicable
- F. Compliance Schedule/Progress Reports
 - The facility is in compliance at this time
- G. Emissions Trading
 - Not Applicable
- H. Acid Rain Requirements
 - Not Applicable
- I. Prevention of Accidental Releases
 - Not Applicable
- J. Stratospheric Ozone Protection Requirements
 - Not Applicable
- K. Pollution Prevention
 - None Applicable
- L. Specific Conditions
 - No new specific conditions

Addendum to Narrative

This modification is classified as a minor modification therefore it is not subject to a public comment period. No comments were received from U.S. EPA Region 4.