Flowers Baking Company of Miami, LLC.
Facility ID No. 0250664
Miami-Dade County

Title V Air Operation Permit Renewal

Permit No. 0250664-009-AV
(Renewal of Title V Air Operation Permit No. 0250664-008-AV)

Permitting & Compliance Authority:
Miami-Dade County
Department of Regulatory and Economic Resources
Division of Environmental Resources Management
Air Quality Management
701 N.W. 1st Court
Second Floor
Miami, Florida 33136

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PERMITTEE:
Flowers Baking Company of Miami, LLC.
17800 NW Miami Court
Miami, FL 33169

Permit No. 0250664-009-AV
Flowers Baking Company of Miami, LLC.
Facility Id. No. 0250664
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit No. 0250664-008-AV for the above referenced facility. The Flowers Baking Company of Miami, LLC. facility is located in Miami-Dade County at 17800 NW Miami Court, Miami, Florida. UTM Coordinates are: Zone 17, 580.27 East and 2868.81 North. Latitude is: 25° 56'16" North; and, Longitude is: 80° 12' 05" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: December 11, 2013
Renewal Application Due Date: April 29, 2018
Expiration Date: December 10, 2018

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H. Patrick Wong, Chief
Air Quality Management
Regulatory & Economic Resources
Miami-Dade County

HPW/tr

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The Flowers Baking Company of Miami, LLC. is a commercial bakery that produces bread and bread-type bun products for human consumption. Bulk quantities of flour are shipped to the facility in tank trucks and the flour is conveyed into one of four (4) storage silos. Flour is weighed and mixed with sugar, yeast, water, and other miscellaneous ingredients. This facility uses three basic types of dough mixing processes: sponge dough, straight dough, and liquid brew. These processes vary in the manner in which the various dough ingredients are mixed, which in turn determines the amount of fermentation time available. Fermentation time can vary from five hours to 20 minutes, usually averaging 2 to 2.5 hours. The bread baking process at this facility is highly mechanized and consists of three high-speed production lines.

After mixing, the final dough is transferred to make-up equipment where it is kneaded, cut to proper size, and deposited into a pan. Before entering an oven, the dough is allowed to rise in a "proof box" which has a high temperature, high humidity environment supplied by steam from two, natural gas fired boilers. Oven emissions are generated by the combustion of natural gas and off-gasing from the bread itself. Off-gasing from the bread is generated as a result of the fermentation process, which causes sugars and starches to be converted to ethanol, carbon dioxide, and water. Fermentation begins immediately following the initial mixing of ingredients and continues until the yeast is killed in the oven. During the initial fermentation period, a skin forms on the top of the dough. The skin keeps the ethanol and carbon dioxide in the dough, thereby allowing the dough to rise and minimizing fugitive emissions. As a result, most of the ethanol generated by fermentation is released in the oven when the skin breaks during the baking process. The baking of bread usually requires 15 to 20 minutes. The bun process differs from the bread production only in the make-up equipment and shorter baking times. Once the bread product exits the oven, it is allowed to cool while it is transferred via conveyor to the slicing, packaging and package labeling area to be prepared for distribution.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Unregulated Emissions Units	
003	One (1) Stewart Systems, Inc., Model Type Conveyorized Bun Oven (Bun Oven No. 2)
004	Two (2) Cleaver Brooks, Model No. CB200-150 Natural Gas Boilers
007	One (1) Baker Perkins, Model No. 970 Replacement Bread Oven

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received July 11, 2013, this facility is not a major source of hazardous air pollutants (HAP). However, this facility is a major source of volatile organic compounds (VOCs). The existing facility is not a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
State Rule Citations – 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, 62-297	All
Local Rule – Chapter 24 – Code of Miami-Dade County	All

SECTION II. FACILITY-WIDE CONDITIONS.

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.
[Rule 62-296.320(2) and 62-210.200 (Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1), F.A.C.]
{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement.
[Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Use of hoods, fans, filters, and similar equipment to contain, capture, and/or vent particulate matter.
b. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
c. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
d. Landscaping or planting of vegetation.
e. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
f. Confining abrasive blasting where possible.
g. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.]

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year.
[Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available

for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm.
[Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective.
[Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:
a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]

FW10. The permittee shall submit all compliance related notifications and reports required of this permit to the Regulatory and Economic Resources (RER) at the following address:

Miami-Dade County
Regulatory and Economic Resources
Air Quality Management
701 NW 1 Court, Suite 400
Miami, Florida 33136-3912

FW11. Special Compliance Tests: When the RER, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the RER.
[Rule 62-297.310(7)(b) F.A.C.]

Subsection A. Emissions Units 003 & 007

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
003	**One (1) Stewart Systems, Inc., Model Type Conveyorized Bun Oven (Bun Oven No. 2)** **Bun Oven installed 11/1996 and utilizes liquid brew formulas** ▪ Max Heat Input: 5.75MMBtu/hr ▪ Max Process Rate: 9,157 lb/hr ▪ Max Baked Bun Production Rate: 8,241 lb/hr (36,097 tons per year) ▪ Direct fired, natural gas 48 MMcf/yr, two exhaust stacks 32' high 1.1' diameter
007	**One (1) Baker Perkins, Model No. 970 Replacement Bread Oven** **Replacement Bread Oven installed 3/98 utilizes straight and sponge dough formulas** ▪ Max Heat Input Rating: 4.98 MMBtu/hr ▪ Max Input Capacity: 11,460 lb/hr ▪ Max Baked Bread Production Rate: 10,314 lb/hr ▪ Direct fired, natural gas 43.8 MMcuft/yr, two exhaust stacks 37' high 1.3' diameter

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity: The maximum bread production rates, in any twelve consecutive month period, shall not exceed:

- Bread Oven (EU-007) – 45,175 tons combined sponge & straight dough bread (with a 10,000 ton limit on straight dough bread)
- Bun Oven No. 2 (EU-003) – 36,096 tons liquid-brew dough

[Rule 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0250664-007-AC]

A.2. Methods of Operation: The natural gas utilization rate, in any twelve consecutive month period, shall not exceed:

- Bread Oven (EU-007) – 43.8 MM cu ft/yr (4.98 MM Btu/hr)
- Bun Oven No. 2 (EU-003) – 48 MM cu ft/yr (5.75 MM Btu/hr)

[Rule 62-213.410 F.A.C.; and, 0250664-007-AC]

A.3. Hours of Operation: These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.; and, 0250664-007-AC]

Emission Limitations and Standards

A.4. Volatile Organic Compounds (VOC): The VOC emissions rate for the bread oven (EU -007) shall not exceed 121.9 tons in any twelve (12) consecutive month period, and, the combined total VOC emissions rate for the two (2) ovens (EU Nos. 003 & 007), shall not exceed 216.31 tons in any twelve (12) consecutive months, updated monthly.
[Rule 62-296.320(1)(a) F.A.C.; and, 0250664-007-AC]

Excess Emissions

A.5 Excess Emissions Allowed: Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C., and Permit No. 0250664-007-AC]

A.6. Excess Emissions Allowed: Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C., and Permit No. 0250664-007-AC]

A.7. Excess Emissions Prohibited: Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C., and Permit No. 0250664-007-AC]

Record keeping and Reporting Requirements

A.8. In order to demonstrate compliance with conditions A.1 thru A.4 above, the permittee shall maintain a rolling, consecutive 12-month log at the facility for a period of at least five years from the date the data is recorded. The log, at a minimum, shall contain the following:

a) Tons of straight dough, sponge dough and liquid brew bread and buns produced
b) VOC emissions
c) Natural gas usage
d) Operating hours

[Rule 62-4.070(3) F.A.C.; and, 0250664-007-AC]

Subsection B. Emissions Unit 004

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
004	**Two (2) Boilers, natural gas fired (installed 1/1/1980)** **Cleaver Brooks Model No. CB200-150, each with the following specifications**: ▪ Max Heat Input Rating: 6.27 MMBtu/hr ▪ Max Process Rate: 6,270 scf gas/hr ▪ Max Gas Usage 54.93 MMcf per year ▪ Exhaust stack, 35' high, 1.3'diameter

Essential Potential To Emit (PTE) Parameters

B.1. Fuel Restrictions: Fuel use for emissions unit 004 shall be limited to natural gas only**.**
[Rule 62-4.070(3) F.A.C.]

B.2. Hours of Operation: These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emissions Limitations and Standards

B.3. Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity)**.**
[Rule 62-296.320(4)(b) F.A.C.]

Excess Emissions

B.4 Excess Emissions Allowed: Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C., and Permit No. 0250664-007-AC]

B.5. Excess Emissions Allowed: Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C., and Permit No. 0250664-007-AC]

B.6. Excess Emissions Prohibited: Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C., and Permit No. 0250664-007-AC]

SECTION IV. APPENDICES

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix TV, Title V General Conditions.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix RR, Facility-Wide Reporting Requirements.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Table H, Permit History.
Statement of Basis.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.