STATEMENT OF BASIS

Title V Air Operation Permit Renewal
FINAL Permit No. 0310418-005-AV
Renewal of Title V Operation Permit No. 0310418-004-AV

APPLICANT

The applicant for this project is Flowers Baking Company of Jacksonville, LLC. The applicant's responsible official and mailing address are: Rick McCombs, Plant President, Flowers Baking Company of Jacksonville, LLC, 2261 West 30th Street, Jacksonville, Florida 32209.

FACILITY DESCRIPTION

The applicant operates the Flowers Baking Company of Jacksonville, LLC, which is located at 2261 West 30th Street, Jacksonville, Florida 32209.

Bread baking at this facility is a highly mechanized process. Bulk quantities of flour are shipped to the facility in cargo trucks and the flour is conveyed into one of the facility's two storage silos (insignificant emission units). These silos, which are located inside the facility, utilize bin vent filters to minimize loss of flour during unloading. The flour is then weighed and mixed with sugar, yeast, water, and other miscellaneous ingredients.

There are three basic types of dough mixing processes utilized at the facility: straight dough, sponge dough and liquid fermentation. These processes vary in the manner in which the various dough ingredients are mixed, which determines the amount of fermentation time available. Fermentation time can vary from 20 minutes or less to five hours or more, usually averaging three to three and a half hours. The baking process, which occurs in the two ovens (bread oven – emission Unit No. 001) and bun oven – Emission Unit No. 002), causes expansion of the loaf to final volume, crust formation, yeast and enzymatic activity inactivation, coagulation of the dough proteins, partial gelatinization of the starch, and reduction of loaf moisture, all of which are necessary to produce high-quality, salable bread products.

Before entering the oven, the dough is allowed to rise in a "proof box". Steam for this high temperature, high-humidity proof box environment is supplied by two natural gas-fired boilers (insignificant emissions units). Oven emissions are generated by two processes: the combustion of natural gas and off-gassing from the bread themselves. Bread product off-gasses are generated as a result of the fermentation process, which causes the 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. This keeps the ethanol and carbon dioxide in the dough, thereby allowing the dough to rise and minimize fugitive emissions. As a result, most of the ethanol generated by the fermentation is released in the oven when the skin breaks during the baking process.

The baking of bread products usually requires 7 to 30 minutes. Once the product exits the oven, it is allowed to cool while it is transferred via conveyor to the slicing and packaging area. Once sliced and packaged, the product is shipped to customers by truck.

EU ID No.	Brief Description
001	Bread Oven
002	Bun Oven

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

Based upon the Title V air operation permit renewal application received June 8, 2012, this facility is not a major source of Hazardous Air Pollutants [HAP(s)]

This facility does not contain any emission units subject to Compliance Assurance Monitoring (CAM) requirements.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew Title V Air Operation Permit No. 0310418-004-AV for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Title V Air Operation Permit No. 0310418-004-AV issued March 24, 2008
Application for a Title V Air Operation Permit Renewal received June 8, 2012

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAPs).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does not operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility does not operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility

PROJECT REVIEW

The purpose of this permitting project is to renew Title V Air Operation Permit No. 0310418-004-AV.

CONCLUSION

This project renews Title V Air Operation Permit No. 0310418-004-AV, which was issued on March 24, 2008. This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statues (FS), and Chapters 62-4, 62-210 and 62-213, Florida Administrative Code (FAC). The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Permitting Authority, in accordance with the terms and conditions of this permit.