TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Pepperidge Farm, Inc.
2222 Interstate Drive
Lakeland, FL 33805-2306

Lakeland Facility

Facility ID No. 1050174

PROJECT

Project No. 1050174-010-AC
Application for Minor Air Construction Permit
Project Name: Add a new microwave heating unit

COUNTY

Polk County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

06/06/2013

Prepared by Quaid Noor

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Facility Description:

This facility owns and operates a commercial food products manufacturing facility in Lakeland, Florida. The facility manufactures bread and cracker products. This facility consists of seven (7) flour silos, one (1) biscuit sugar silo, five (5) baking lines which include five (5) natural gas-fired ovens for the baking lines and two (2) regenerative thermal oxidizers (RTO).

Particulate emissions from silo loading operations are each controlled by baghouse dust collectors mounted on the top of each silo. VOC emissions from baking line Nos. 1 – 3 and their natural gas-fired ovens are uncontrolled. VOC emissions from Baking Line Nos. 5 and 6 are routed through two separate RTOs, which are also fired with natural gas. The temperature of each RTO is continuously monitored and recorded. The RTOs are subject to the Compliance Assurance Monitoring requirements of 40 CFR 64 and 62-213.440(4)(b)4., F.A.C.

Baking Line No. 4 has been permanently removed from the facility.

Also included in this permit are miscellaneous insignificant emissions units and/or activities that include two (2) natural gas-fired boilers, a gas-fired hot water heater, a industrial clothes dryer, oiling operation of facility machinery parts, maintenance/repair/painting, and other activities listed in Appendix I-1.

Based on the Title V Air Operation Renewal application received August 21, 2009, this facility is a major source of hazardous air pollutants (HAPs). This facility is classified as a PSD major facility.

II. Project Description:

A. Applicant:
Mr. Sam Morrone, Plant Manager
Pepperidge Farm, Inc. – Lakeland Facility
2222 Interstate Drive
Lakeland, FL 33805-2306

B. Professional Engineer:
Mr. William Straub, P.E.
all4inc.com.
2393 Kimberton Road
Kimberton, PA 19442-0299

C. Project Location:
2222 Interstate Drive
Lakeland, FL 33805-2306

D. Project Summary:
This is a non-PSD minor construction permit for an existing PSD major facility. The applicant proposes to add a new microwave heating unit to the existing Baking Line No. 5 Cracker Oven No. 2, EU No. 016. In addition to the proposed microwave heating unit, the Lakeland facility will be adding a new chiller for the proposed microwave unit, new product conveyors, and a new seasoning system as part of this project. This additional equipment shall not result in increase in production or significant increase in potential to emit air pollutants from the facility.

E. Application Information:
Application Received on: April 22, 2013
Application Complete: April 22, 2013

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	**Y/N**	**Comments**
Rule 62-210.300, F.A.C. – Permits Required	Y	Subject to general permitting requirements
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	Facility is a PSD major source but this project does not trigger PSD review
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Facility is a source of unconfined PM
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	The facility is a source of VOC and odors.
Rule 62-296.401-418, F.A.C. - Stationary Source Emission Standards	N	There is no applicable source category
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Polk County is not an air quality maintenance area for ozone
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	Flour silos at this facility are exempt from the PM RACT requirements

Subject to:	Y/N	Comments
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	N	There is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	There is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63)	N	There is no MACT standards for bakeries. Since the proposed project by itself is not a major source of HAPs, a case-by-case MACT does not apply
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	Y	Facility is a major source for VOC and HAPs
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	Testing is required to verify compliance with the limitations of RTO VOC destruction efficiency and residence time, and visible emissions from the RTO and flour silos.

III. Summary of Emissions

Pollutant	EU No. and brief description	**Potential Emissions** (tpy)	**Allowable Emissions** (tpy, opacity)
PM, PM_{10}, $PM_{2.5}$	Existing Facility	3.72	3.72
	016	0.28	0.28
	Total	**4.0**	**4.0**
VOC	Existing Facility	310.3	310.3
	016	10.6	10.6
	Total	**320.9**	**320.9**
NOx	Existing Facility	43.80	43.80
	016	3.60	3.60
	Total	**47.4**	**47.4**
SO_2	Existing Facility	0.22	0.22
	016	0.02	0.02
	Total	**0.24**	**0.24**
CO	Existing Facility	36.30	36.30
	016	3.10	3.10
	Total	**39.4**	**39.4**

Pollutant	**EU No. and brief description**	**Potential Emissions** (tpy)	**Allowable Emissions** (tpy, opacity)
Individual HAP (acetaldehyde)	Existing Facility	19.34	19.34
	016	0.66	0.66
	Total	**20.0**	**20.0**
			VE Limitation
VE	016		<20%

*{*Fugitive VOC and acetaldehyde emissions from the proposed project are estimated to at 1 and 0.06 tons/yr respectively.*
HAP emissions is considered about 6.25% of the VOC emissions (Ref: Similar source testing)}

PSD Applicability Analysis

Pollutant	Baseline Actual Emissions (TPY)	Projected Actual Emissions (TPY)	Emissions Increase[1] (TPY)	Significant Emissions Rate (TPY)	PSD Required? Y/N
VOC	0.75	10.6	9.85	40	N

[1]*Emissions Increase = Projected Actual Emissions – Baseline Actual Emissions*

IV. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

V. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).