TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Kraft Foods Group, Inc.
735 East Bay Street
Jacksonville, Florida 32202

Maxwell House Coffee
Facility ID No. 0310004

PROJECT

Project No. 0310004-026-AC
Application for Air Construction Permit

COUNTY

Duval, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Waste and Air Resource Management
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

COMPLIANCE AUTHORITY

Florida Department of Environmental Protection
Northeast District Office
Compliance Assurance
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

October 23, 2014

1. 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 (FS). 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. The City of Jacksonville (COJ), Jacksonville Environmental Protection Board (JEPB), regularly adopts these state regulations in Rule 2, JEPB.

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, FAC.

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.

Facility Description and Location

Kraft Foods Group, Inc., Maxwell House Coffee produces roasted coffee with batch roasters. The facility consists essentially of material handling, cleaning, roasting, cooling, grinding, and packaging operations.
This facility is located at 735 East Bay Street, Jacksonville, Duval County, FL; UTM Coordinates: Zone 17, 437.54 km East and 3354.71 km North; Latitude: 30° 19’ 27” North and Longitude: 81° 38’ 53” West. The facility is located in an area designated as unclassifiable for the air pollutants particulate matter less than or equal to ten (10) micrometers, sulfur dioxide, and lead; and in an air quality maintenance area for ozone and particulate matter pursuant to Chapter 62-204, F.A.C., and Rule 2.201, JEPB.

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

The purpose of this permit is to authorize an after-the-fact modification of the Gevalia Grinding and SIG-VAC Packaging Machine process with the reduction of the baghouse fan from 5,000 Cubic Feet per Minute (CFM) to 500 CFM and to update the allowable emissions, operating capacity, and process description for the Emission Unit No. 530. The permit also updates the descriptions for emission units EU 509, EU 513, EU 524, and EU 538, revises the rule reference for emission unit 559 particulate matter emissions and visible emissions, and changes the testing schedule for each emission unit to reflect "federal fiscal year" or "within twelve (12) months of permit renewal."

The permit is not modifying the capacity for emission units EU 509 and EU 518. The facility indicated that is not possible to calculate a pounds per hour flow rate for the Chaff.

Proposed Work

The permittee has been granted after-the-fact authorization for changes to the following equipment:

EU No. 530:

- Replace the 5,000 CFM fan in the Flex-Kleen Model 84-WRBC-80 BH baghouse with a 500 CFM fan.

Processing Schedule

September 29, 2014 -- Received the application for a construction permit.
October 14, 2014 – Additional information received from the applicant
October 15, 2014 -- Application complete
October XX, 2014 – Draft permit issued

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, FAC. Under preconstruction review, it must first be determined if a project is subject to the PSD requirements ("PSD applicability review") and, if so, a PSD preconstruction review must be conducted. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion

plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The existing facility is not a major stationary source of air pollution for Prevention of Significant Deterioration (PSD) purposes because the potential emissions of PSD air pollutants are less than 250 tons per year pursuant to Rule 62-210.200(194), F.A.C., and Rule 2.301, JEPB. This project is not subject to PSD preconstruction review requirements since the proposed project itself has potential emissions of PSD air pollutants that are less than 250 tons per year pursuant to Rule 62-210.200(194), F.A.C., and Rule 2.301, JEPB. The facility after completion of this project will not be a major stationary source of air pollution for PSD purposes because the potential emissions of PSD air pollutants will be less than 250 tons per year pursuant to Rule 62-210.200(194), F.A.C., and Rule 2.301, JEPB.

3. DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION REVIEW

Discussion of Emissions

Particulate Matter (PM) emissions are associated with the production of roasted coffee with batch and continuous roasters. The emission units which are the subject of this permitting action emit PM, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ are not specifically emission limited by this project other than through the emission limits for PM.

Local COJ, JEPB Requirements

The EU shall be subject to the COJ Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

The EUs shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIV.

State Requirements

The EU No. 530 and EU No. 559 are no longer subject to the requirements of Rule 62-296.700, F.A.C., and Rule 2.1101, JEPB, Reasonably Available Control Technology (RACT) Particulate Matter; and Rule 62-296.711, F.A.C. and Rule 2.1101, JEPB, Materials Handling, Sizing, Screening, Crushing and Grinding Operations because the total emissions for this unit are less than one (1) ton per year.

EU ID Number	Current ACFM	PM Limitation	Project Particulate Matter Emissions		Explanation for Exemption
			Pounds Per Hour	Tons Per Year	
530	500	0.011 gr/dscf	0.047	0.206	RACT Exemption, i.e. <1 TPY emissions
559	247	0.03	0.06	0.28	RACT Exemption, i.e. <1 TPY emissions

Federal Requirements

A. NSPS Review

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. This minor modification will not subject this emission unit to an applicable NSPS.

B. NESHAP Review

The U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). 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. This minor modification will not subject this emission unit to an applicable NESHAP.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable local, 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. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Merrilee Palcic is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection, Northeast District Office, Waste and Air Resource Management Program, 8800 Baymeadows Way West, Suite 100, Jacksonville, FL 32256, Phone: 904-256-1700.