TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Anderson Columbia Co., Inc.
Post Office Box 1829
Lake City, Florida 32056

Plant #16
Facility ID No. 7775064

PROJECT

Project No. 7775064-008-AC
Application for Minor Source Air Construction Permit
Lime Silo Addition

COUNTY

Jackson, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Section
Northwest District Office
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

March 18, 2011

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 (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); 62-296 (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.

Facility Description and Location

Anderson Columbia Co., Inc., Plant #16 is an existing asphalt concrete plant. The facility makes asphalt paving mixtures, which is categorized under Standard Industrial Classification Code No. 2951. The facility is located in Jackson County at 2316 Highway 71 in Marianna, Florida. The UTM coordinates of the existing facility are Zone 16, 672.1 km East, and 3401.2 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

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 not 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

This project will add a 35 ton lime silo with a top-mounted baghouse to the existing facility.

Processing Schedule

2/9/2011 Received the application for a minor source air pollution construction permit.

2/14/2011 Requested additional information.

3/4/2011 Received additional information; application complete.

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, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. 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

As provided in the application, the following table summarizes potential emissions and PSD applicability for the project.

Table A. Potential Emissions (Tons/Year) and PSD Applicability

Pollutant (TPY)	Pre-Project Potential Emissions	Contempo-raneous Emissions	Post Project Potential Emissions	Total Emissions Change	Significant Emissions Rate	Subject to PSD
CO	32.7	-20.9*	32.7	0	100	NO
NO_X	14.5	-83.5*	14.5	0	40	NO

Pollutant (TPY)	Pre-Project Potential Emissions	Contempo-raneous Emissions	Post Project Potential Emissions	Total Emissions Change	Significant Emissions Rate	Subject to PSD
PM/PM_{10}	8.31	0.2*	8.33	0.02	25/15	NO
SO_2	69.6	NA	69.6	0	40	NO
VOC	8	-0.83*	8	0	40	NO
Others						

*Contemporaneous emission changes occurred as a result of 7775064-006-AC, which replaced Plant No.3 with Plant No. 16 which has a slightly higher air flow rate, but a substantially smaller asphalt cement heater.

The facility is not an existing major stationary source with respect to PSD, because its potential emissions of each pollutant are less than 250 TPY. Potential emissions from the project itself do not exceed the PSD major stationary source threshold of 250 TPY. Therefore, this project is subject only to the general preconstruction review requirements of Rule 62-212.300, F.A.C.

3. APPLICATION REVIEW

Application Fee

This is an AC/1F ($250.00 fee) for a source with emissions less than 5 tons per year.

Discussion of Emissions

Particulate emissions from the new source result from loading lime into the lime silo. The emissions will be limited to the amounts listed in Table A by restricting the usage of lime to 5,000 tons per year. Based on AP-42 Table 11.12-2, potential uncontrolled PM and PM10 emissions from the lime silo are 7.85 TPY and 2.75 TPY, respectively; controlled emissions are 0.022 TPY and 0.012 TPY, respectively. This permit requires that the emissions be controlled at all times.

State Requirements

The facility is regulated under Rule 62-210.300(3)(c)2., F.A.C. (Conditional Exemptions from Title V Permitting). The facility is a synthetic minor source limited to 500,000 tons of asphalt concrete per consecutive 12-month period. Site fuel oil consumption is limited to 1.2 million gallons per consecutive 12-month period and may contain no more than 1% sulfur. The maximum instantaneous production rate, at which compliance must be demonstrated, is 300 tons per hour. Particulate emissions from the dryer baghouse are limited to 0.04 grains per dry standard cubic foot. Rule 62-204.800(8)(b)(12), F.A.C. incorporates the Federal NSPS requirements by reference.

Federal NSPS Provisions

The facility is regulated under 40 CFR 60 subpart I, Hot Mix Asphalt Facilities.

Federal NESHAP Provisions

The facility is not regulated under Federal NESHAP Provisions.

Other Draft Permit Requirements

Usage of lime will be limited to 5,000 tons per year. Purchase records shall be maintained to ensure compliance with this provision. The lime silo shall not be operated without the baghouse, and the maintenance and monitoring of the lime silo and baghouse for proper operation will be added to the operation and maintenance plan for the site.

4. 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. Teresa Knepper 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 850/595-0670 or teresa.knepper@dep.state.fl.us.