TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Roads, Inc.
106 Stone Boulevard
Cantonment, Florida 32533

Cantonment Asphalt Concrete Plant
Facility ID No. 7775744

PROJECT

Project No. 7775744-001-AC
Application for Minor Source Air Construction Permit
New Hot-Mix Asphalt Concrete Plant

COUNTY

Escambia, Florida

PERMITTING AUTHORITY

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

October 9, 2012

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

Roads, Inc. proposes to construct a new synthetic minor facility, a relocatable asphalt concrete plant, which is categorized under Standard Industrial Classification Code No. 2951, Asphalt Paving Mixtures and Blocks. The new facility will be located in Escambia County at 15 Becks Lake Road in Cantonment, Florida. The UTM coordinates of the new facility are Zone 16, 469.51 km East, and 3386.67 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).

This new asphalt concrete plant will be built across Stone Boulevard from the existing Roads, Inc. Cantonment Asphalt Plant (Facility ID 7775285), which will be decommissioned when the new asphalt plant begins operation.

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 construct a new 300 TPH Hot-Mix relocatable Asphalt Concrete Plant with a baghouse, an aggregate feed system, a drum dryer, two electrically heated asphalt cement storage tanks and three electrically heated asphalt product storage silos. The primary source of fuel for the asphalt plant will be natural gas; however, the facility may burn No.2 and No. 4 fuel oil.

Aggregate will be brought on site by trucks and stored in piles. A relocatable RAP crushing system, under an Air General Permit, may be operated at the facility periodically to provide RAP for the asphalt mix.

Processing Schedule

September 19, 2012 Received the application for a minor source air pollution construction permit.

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.

<u>PSD Applicability for Project</u>

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	Potential Emissions	Proposed Project Potential Emissions	PSD Major Threshold	Significant Emissions Rate	Subject To PSD?
CO	None - new	32.5	250	100	No
NO_X	None - new	13.75	250	40	No
PM_{total}/ PM_{10}	None - new	8.25/5.75	250	25	No
SO_2	None - new	49.5	250	40	No
VOC	None - new	8.0	250	40	No
HAP (Combined)		1.9			
Formaldehyde		0.19			

Emission factors for PM_{total} and PM_{10} are from AP-42, Table 11.1-3 (Baghouse with fabric filter). Emission factors for NOx and CO are from AP-42, Table 11.1-7. The emission factor for VOC is from AP-42 Table 11.1-8, and the emission factor for SO_2 is from AP-42, Table 1.3-1.

This is a new facility. The PSD major stationary source threshold for this type of facility is 250 TPY of a regulated pollutant. As shown in the above table, the potential emissions increases alone from the proposed project itself do not equal or exceed the PSD major stationary source thresholds for this type of facility. Based on these facts it is determined that the project is not subject to PSD preconstruction review.

3. APPLICATION REVIEW

Application Fee

This is an AC/1D ($2,000.00 fee) for a source of emissions more than 25 but less than 50 tons per year.

Normally this type of facility would be classified as AC/1C ($4,500.00 fee) for a source of emissions more than 50 but less than 100 tons per year, but applicant took restrictions on fuel usage and fuel oil sulfur content to remain under 50 TPY.

Discussion of Emissions

Potential emissions are calculated based on regulated activities associated with asphalt production, and include both fugitive production-related emissions, resulting from the transport of asphalt concrete from drum mix to storage silo and from silo to loading operations, and ducted process emissions generated during product manufacturing. Fugitive emissions from yard storage piles and vehicular traffic are not included in the estimate of potential emissions.

State Requirements

This emissions unit is regulated under Rule 62-210.300(3)(c)2., F.A.C. (Conditional Exemptions from Title V Permitting). The facility is conditionally exempt from Title V permitting with annual throughput limited to 500,000 tons of asphalt concrete per year. The applicant requested fuel oil consumption be limited to 1.1 million gallons in any consecutive 12-month period and the sulfur content of the fuel oil to not exceed 0.6 percent, by weight, as compared to Rule 62-210.300(3)(c)2 requirements of 1.2 MMGal and 1%. To ensure that the facility remains a Non-Title V facility, the above-mentioned facility-wide limits shall also include the periodically operated portable RAP crusher.

Federal NSPS Provisions

This emissions unit is subject to NSPS - 40 CFR 60, subpart I (Standards of Performance for Hot Mix Asphalt

Facilities).

Federal NESHAP Provisions

Not Applicable.

Other Draft Permit Requirements

There are no additional draft permit requirements.

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. Howard Ard 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, Howard Ard, at 850.595.0622 or howard.ard@dep.state.fl.us.