TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

ParexUSA, Inc.
2501 Hwy 544
Haines City, FL

Haines City,
FL

Facility ID No. 1050386

PROJECT

Project No. 1050386-004-AC
Application for Minor Air Construction Permit
Project Name: Add a mixing/bagging line and increase throughput

COUNTY

Polk County, Florida

PERMITTING AUTHORITY

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

May 16, 2012

Prepared by Nancy E. Knight

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. Project Description:

A. Applicant:

Bill Olsen, Regional Manager
ParexUSA, Inc.
2501 Hwy 544
Haines City, FL 33845

B. Professional Engineer:

Dean H. Myers, P.E.
General Environmental Engineering, Inc.
205 W. Palmetto St.
Lakeland, FL 33815

C. Project Location:
2501 Hwy 544
Haines City, FL 33845

D. Project Summary:

This project will add a mixing/bagging line with an associated dust collector at a tile grout blending facility. It will also increase the annual raw material throughput from 26,000 tons to 100,000 tons, as further described in the permit.

ParexUSA

Dust Collector for Mixing/Bagging Line 2

Mixing/Bagging Lines 1 (right) and 2 (left)

E. Application Information:

Application Received on: April 16, 2012
Additional Information Requested on: April 20, 2012
Additional Information Received on: May 11, 2012
Application Complete: May 11, 2012

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 not a PSD major source.
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Grout mixing and bagging operations are a source of unconfined particulate matter emissions.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	N	Grout mixing and bagging operations are not a source of VOC or odors.
Rule 62-296.401-470, F.A.C. - Stationary Source Emission Standards	Y	EU Nos. 001-011 are subject to 62-296.414, F.A.C. – Concrete Batch Plants.
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	There is no applicable source category.
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 applicable source category.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	Facility is a synthetic non-Title V source.
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	VE testing is required for all emission units.

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (TPY)[1]	Allowable Emissions (Opacity)
PM	001-009 -Raw Material Storage Bins	0.02[2]	N/A
	010 - Mixing and Bagging Line 1	0.09[3]	N/A
	011 - Mixing and Bagging Line 2	0.06[4]	N/A
	Total	0.11[5]	
PM_{10}	001-009 -Raw Material Storage Bins	0.01[2]	N/A
	010 - Mixing and Bagging Line 1	0.02[3]	N/A
	011 - Mixing and Bagging Line 2	0.02[4]	N/A
	Total	0.03[5]	
VE	001-009 -Raw Material Storage Bins		5%
	010 - Mixing and Bagging Line 1		5%
	011 - Mixing and Bagging Line 2		5%

[1] Based on a material throughput rate of 100,000 tons per year.

[2] Controlled emissions:

control efficiency of 99.99%

AP-42 emission factor of 3.14 lbs/ton for PM

AP-42 emission factor of 1.10 lbs/ton for PM_{10}

[3] Controlled emissions:

assuming 100,000 tons of raw material going through Mixing and Bagging Line 1

control efficiency of 99.7%

AP-42 emission factor of 0.572 lbs/ton for PM

AP-42 emission factor of 0.156 lbs/ton for PM_{10}

[4] Controlled emissions:

assuming 100,000 tons of raw material going through Mixing and Bagging Line 2

control efficiency of 99.8%

AP-42 emission factor of 0.572 lbs/ton for PM

AP-42 emission factor of 0.156 lbs/ton for PM_{10}

[5] Since it is not known how much of the total allowable raw material throughput will go through Line 1 and how much will go through Line 2, potential emissions were calculated using the worst-case scenario (i.e., all 100,000 tons of raw material going through Line 1).

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).