TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Hanson Pipe & Precast, LLC
840 West Avenue
Deland, FL 32720

Winter Haven Facility

Facility ID No. 1050388

PROJECT

Project No. 1050388-004-AC
Application for Minor Air Construction Permit
Project Name: Add portable crusher

COUNTY

Polk, Florida

PERMITTING AUTHORITY

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

January 14, 2011

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Prepared by Nancy E. Knight

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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:

Charles Piwowarski, South Region Environmental Manager
Lehigh Hanson
840 West Avenue
Deland, FL 32720

B. Professional Engineer:

Brad James, P.E.
Trinity Consultants
4767 New Broad Street
Orlando, FL 32814

C. Project Location:

1285 Lucerne Loop Road
Winter Haven, FL

D. Project Summary:

This construction permit authorizes the after-the-fact operation of a portable concrete crushing system at a concrete pipe manufacturing facility, as further described in the permit. It also changes the recordkeeping requirements for VOC and HAP containing materials to record quantity received instead of quantity used.

E. Application Information:

Application Received on: 08/16/2010
Additional Information Requested on: 08/25/2010
Additional Information Received on: 10/01/2010
Application Complete: 10/01/2010

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. - Project Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C.	Y	Not exempt from 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	Concrete batching and crushing operations are a source of unconfined particulate matter emissions
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards	Y	painting operations are a source of VOC and odors

Subject to:	Y/N	Comments
(VOCs and Odor)		
Rule 62-296.400, 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 an attainment 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)	Y	The concrete crushing system is subject to 40 CFR 60, Subpart OOO
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 EU No. 003

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (TPY)	Allowable Emissions (TPY)
PM	Aggregate Transfer (exempt)	4.56[1]	
	Sand Transfer (exempt)	1.07[1]	
	Storage Silos (exempt)	0.36[1]	
	Curing Chambers (exempt)	0.15[4]	

Pollutant	EU No. and brief description	Potential Emissions (TPY)	Allowable Emissions (TPY)
PM	Crusher Engine (exempt)	0.35[1]	
	003 – Portable Crushing	1.9[2]	
	Emergency Generator (exempt)	0.30[5]	
	Facility Total	8.69	
PM10	Aggregate Transfer (exempt)	2.21[1]	
	Sand Transfer (exempt)	0.50[1]	
	Storage Silos (exempt)	0.21[1]	
	Curing Chambers (exempt)	0.15[4]	
	Crusher Engine (exempt)	0.35[3]	
	003 – Portable Crushing	0.70[2]	
	Emergency Generator (exempt)	0.30[5]	
	Facility Total	4.42	
VOC	002- Pipe Forming & Coating	89.7[1]	90.0

Pollutant	EU No. and brief description	Potential Emissions (TPY)	Allowable Emissions (TPY)
VOC	Curing Chambers (exempt)	0.21[4]	
	Crusher Engine (exempt)	0.39[3]	
	Emergency Generator (exempt)	0.34[5]	
	Facility Total	90.64	
NOx	Curing Chambers (exempt)	2.71[4]	
	Crusher Engine (exempt)	4.91[3]	
	Emergency Generator (exempt)	4.16[5]	
	Facility Total	11.78	
SO2	Curing Chambers (exempt)	0.004[4]	
	Crusher Engine (exempt)	0.32[3]	
	Emergency Generator (exempt)	0.27[5]	
	Facility Total	0.59	
CO	Curing Chambers (exempt)	1.57[4]	

Pollutant	EU No. and brief description	Potential Emissions (TPY)	Allowable Emissions (TPY)
CO	Crusher Engine (exempt)	1.06[3]	
	Emergency Generator (exempt)	0.90[5]	
	Facility Total	3.53	
Total HAP	002 – Pipe Forming & Coating	20.0[1]	20.0
	Crusher Engine (exempt)	0.007[3]	
	Emergency Generator (exempt)	0.006[5]	
	Facility Total	20.01	20.0
Individual HAP -Xylene	002 – Pipe Forming & Coating	7.7[1]	8.0
	Facility Total	7.7	8.0
Individual HAP -Glycol Ether	002 – Pipe Forming & Coating	3.2[1]	8.0
	Facility Total	3.2	8.0
Individual HAP - Ethylbenzene	002 – Pipe Forming & Coating	1.5[1]	8.0
	Facility Total	1.5	8.0

VE	003 – Portable Crushing		10%, 15%, and 20% or 7%, 12% and 20% for crushers and affected pieces of equipment that commenced construction, modification or reconstruction on or after 4/22/2008

[1] Taken from the permit application received August 16, 2010
[2] Based on operating 975 hours per year at 200 TPH. Emission factors from AP-42 Section 11.19-2, Table 11,19.2-2.
[3] Based on operating 975 hours per year. Emission factors from AP-42, Chapter 3.3, Table 3.3-1
[4] Based on Operating 8760 hours per year. Emission factors from AP-42, Chapter 1.5
[5] Based on operating 500 hours per year. Emission factors from AP-42, Chapter 3.3, Table 3.3-1

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).