TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Lhoist North America
9020 Overlook Blvd., Suite 200
Brentwood, TN 37027

Lowell Plant

Facility ID No. 0830016

PROJECT

Project No. 0830016-015-AF
Application for Synthetic Minor Source Air Operation Permit
Project Name: Limestone Mining and Production

COUNTY

Marion County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Central District Office
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767

June 20, 23, and 25, 2012

Prepared by Jeff Rustin, P.E.

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:

Mr. Jim Ruddell, Regional Environmental Manager
Lhoist North America
9020 Overlook Blvd., Suite 200
Brentwood, TN 37027

B. Professional Engineer:

Mr. Robert Kehrman, P.E.

C. Project Location:

11661 NW Gainesville Road
Ocala, FL

D. Project Summary:

This is an Air Operation Permit for a synthetic minor facility that incorporates the conditions from construction permit 0830016-013-AC. This is a limestone mining and production facility with two similar groups of regulated production units, the Drying System and the Material Handling System. Construction Permit 0830016-013-AC was issued to modify the existing Material Handling System which included Emission Units 002 and 011. In addition, Emission Unit 003 was removed.

E. Application Information:

Application Received 03/21/2012
Request for Additional Information No. 1: 4/20/2012
Information Received and Application Complete: 04/27/2012

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. – Stationary Source General Requirements	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, F.A.C. - General Particulate Emission Limiting Standards	Y	The Fluidized Bed Dryer and the Rotary Dryer are subject to the Rule 62-296.320(4)(a)(2), Process Weight Table 296.320-1, F.A.C.; however, the requirement to conduct particulate testing for the Fluidized Bed Dryer and the Rotary Dryer is waived because facility has baghouses and accepted a visible emission standard of 5 percent opacity in accordance with 62-297.620(4).
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Facility operations are a source of VOC emissions, but recently reported VOC emissions are less than one ton per year.
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	N	Rules 62-296.320(4)(a)2, F.A.C. & 62-297.620, F.A.C. apply (VE: 5 % opacity).
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Marion County is an attainment area for ozone.

Subject to:	Y/N	Comments
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	EU 002, EU 004 and EU 013 are subject to 40 CFR Part 60, Subpart A and 40 CFR Part 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 category.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	Facility is a synthetic minor source.
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	VE Testing is required.

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (tpy)	Allowable Emissions (tpy, opacity)
PM	EU 005 and EU 006 (combined)	50.0	50.0
PM	Facility excluding EU 005 and EU 006	40.0	45.0
NOx	Facility	77.0	77.0
SO2	Facility	21.4	21.4
VE	Facility (excluding EU 002, EU 004, and EU 013)		5 percent opacity
VE	EU 002, EU 004, and EU 013		7 percent opacity or 10 percent opacity (see Condition B.2.)

IV. Explanation for testing, emission limits: Stack testing conducted on the Fluid Bed Dryer on August 21 and 22, 2007 revealed low emissions that are a small fraction of the allowable limits. Visible emissions average was less than one percent (current limit is 5 percent) and SO2 emissions were less than 1.5 pounds/hr. Emission Factors based on previous stack testing experience and AP-42.

V. Federal NSPS and/or NESHAP Provisions

A. NSPS Regulations: EU 002, EU 004, and EU 013 are subject to 40 CFR 60, Subpart A-General Provisions (See Appendix E) and 40 CFR 60, Subpart OOO-Standards of Performance for Nonmetallic Mineral Processing Plants (See Appendix F).

B. NESHAP Regulations: None

VI. 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.

VII. 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, Central District, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767.

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).