TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Bartow Ethanol of Florida, L.C.
1705 East Mann Road
Bartow, FL 33830

Facility ID No. 1050145

PROJECT

Project No. 1050145-004-AC
Application for Minor Air Construction Permit
Project Name: After-the-Fact Construction Modification Permit

COUNTY

Polk, Florida

PERMITTING AUTHORITY

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

August 26, 2011

Prepared by Jim McDonald

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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 Muntz, Vice President/General Manager
1705 East Mann Road
Bartow, FL 33830

B. Professional Engineer:

Mr. John McKelvey, P.E.
Case Engineering, Inc.
5925 Imperial Parkway, Suite 226
Mulberry, FL 33860

C. Project Location: 1705 East Mann Road, Bartow, Polk County, Florida

D. Project Summary: This permit authorizes the after-the-fact construction modification of an existing beverage grade ethanol manufacturing facility (Standard Industrial Classification No. 2085). A fire on April 24, 2009, destroyed parts of the beverage grade ethanol manufacturing facility. The primary modifications to the facility are:

- Added new tanks (Facility Plot Plan attached to application dated August 3, 2011, shows new and existing tanks).
- Change the use of some of the existing tanks.
- Delete the (standby) boiler (Emission Unit No. 002).
- Increase the maximum allowable beverage grade ethanol production rate from 812,200 to 2,010,600 gallons per any consecutive 12-month period.
- Delete the limitation requiring a maximum of 70 fermentation batches.
- Delete the facility-wide allowable VOC emission limitation of 9.0 tons per any consecutive 12-month period.
- Delete the maximum allowable throughput limitations for the bonded, methanol, and fusel oil tanks.

Therefore, this project will delete Emission Unit No. 002 and modify the following emissions units.

Facility ID No. 1050145	
ID No.	Emission Unit Description
004	Process, Storage, and Loadout Tanks
006	Fermenting and Distillation Processes

E. Application Information:

Application Received on: August 9, 2011
Additional Information Requested on: N/A
Additional Information Received on: August 22, 2011
Application Complete: August 22, 2011

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

Subject to:	Y/N	Comments
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	operations could be 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)	Y	operations are a source of VOC and odors
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 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)	Y	the facility is only subject to the recordkeeping requirements of 40 CFR 60.486a(i) in 40 CFR 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
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 natural non-Title V source
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	N	no testing is required

III. Summary of Emissions: The following table does not address emissions from exempt activities, since they are expected to be insignificant and will not cause the facility to become a Title V source.

Pollutant	EU No. and brief description	Potential Emissions tons/yr.	Allowable Emissions tons/yr.
VOC	004 – Process, Storage, and Loadout Tanks	19.53	N/A
	006 – Fermenting and	21.93	N/A

Pollutant	EU No. and brief description	Potential Emissions tons/yr.	Allowable Emissions tons/yr.
	Distillation Processes		
	Total	41.46	N/A
Methanol	004 – Process, Storage, and Loadout Tanks	0.31	N/A
	006 – Fermenting and Distillation Processes	Expected to be insignificant	N/A
	Total	0.31	N/A
VE	004 – Process, Storage, and Loadout Tanks		<20% opacity
	006 – Fermenting and Distillation Processes		<20% opacity

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).