



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

Fiberstar, Inc.
1700 County Road 833
Clewiston, Florida 33440

Fiberstar, Inc.
Facility ID No. 0510022

PROJECT

Project No. 0510022-003-AC
Application for Minor Source Air Construction Permit
Modification to Air Construction Permit 0510022-002-AC

COUNTY

Hendry, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Section
South District Office
2295 Victoria Avenue, Suite 364
P.O. Box 2549
Fort Myers, Florida 33902-2549

July 27, 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); 62-213 (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.

Facility Description and Location

Fiberstar, Inc. is an existing citrus pulp and peel processing facility, which is categorized under Standard Industrial Classification Code No. 2034. The facility is located in Hendry County at 1700 County Road 833 in Clewiston, Florida. The UTM coordinates of the existing facility are Zone 17, 481.6 km East, and 2957.7 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).

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 modifies air construction permit No. 0510022-002-AC to reflect revised plans for expansion. The proposed project reduces EU001's capacity and heat input, removes EU002 (no longer proposed to be constructed), removes EU003, EU004, EU006 and EU007 (meets criteria for generic emissions unit exemption) and unregulates EU005 [meets criteria for categorical exemption under 62-210.300(3)(a)33., F.A.C.] This project requests unrestricted hours of operation. This modification results in a decrease in potential emissions for the proposed construction. The potential emissions upon completion of this project are 51.07 TPY particulate matter, 33.94 TPY nitrogen oxides, 11.99 TPY carbon monoxide, 28.45 TPY volatile organic compounds and insignificant amounts of SO₂.

Processing Schedule

June 11, 2012 Received the application for a minor source air pollution construction permit.

June 21, 2012 Requested additional information.

July 12, 2012 Received additional information; application complete.

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 (SO₂); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS), including H₂S; reduced sulfur compounds, including H₂S; 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 SO₂ 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 µg/m³, 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.

PSD Applicability for Project

This facility is not is considered a major stationary source with respect to PSD because it does not emit and does not have the potential to emit 250 tons per year or more of any regulated air pollutant; or 100 tons per year or

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more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories.

As provided in the application, the following table summarizes potential emissions.

Table A. Potential Emissions (Tons/Year)

Pollutant	Project Potential Emissions (TPY)
CO	11.99
NO _x	33.94
PM/PM ₁₀	51.07
SO ₂	0.08
VOC	28.45

As shown in the above table, total project emissions will not exceed the PSD rates; therefore, the project is not subject to PSD preconstruction review.

3. APPLICATION REVIEW

Discussion of Emissions

In March 2003 the Department found that based on information provided from the facility's consultant that the facility's emissions activities complied with the Generic Facility Exemption under 62-210.300, F.A.C.. Fiberstar is located on adjacent contiguous property owned by Southern Gardens. The facility at the time received all its raw product (pulp) from Southern Gardens and had the same major SIC code. In March 2003 the Department also found that the facility was not under common ownership or control of Southern Gardens (Facility ID 0510015). This was again the opinion in a Department letter dated April 6, 2012. Emission units/activities at the facility under the generic facility exemption were one citrus pulp dryer (25 MMBtu/hr heat input, capacity 1000 lbs/hr (bone dry) and 14,300 lbs/hr wet input) with cyclone, an enclosed electric grinder and an enclosed bagging operation. The emissions were reported as 1.6 TPY PM, 0.03 TPY SO₂, 13.1 TPY NO_x, 4.7 TPY CO and 6.5 TPY VOC. The facility hours of operation were 4,500 hrs/yr. The fuel burned for the dryer was propane or natural gas.

In July 2004 Fiberstar submitted an air construction application to increase the production rate [to 10,000 lbs/hr dry, (5,000 each dryer)], increase hours of operation to 8760 hrs per year, add a second dryer (30 MMBtu/hr), increase the heat input of the existing dryer (from 25 to 30 MMBtu/hr) and add a second electric grinder. The AC project also disclosed the facility had a boiler exempt from permit since it complied with the categorical exemption and that the facility had two silos that met the generic emission unit exemption (PM < 5 TPY).

To date the proposed construction permitted under permit No. 0510015-002-AC has not been constructed. Permit No. 0510015-002-AC expires December 31, 2012. This project 0510015-003-AC modifies permit No. 0510015-002-AC to reflect changes in the facility expansion plans.

The proposed project reduces EU001's permitted capacity and heat input, removes EU002 (no longer proposed to be constructed), removes EU003, EU004, EU006 and EU007 (meets criteria for generic emissions unit exemption) and unregulates EU005 [meets criteria for categorical exemption under 62-210.300(3)(a)33., F.A.C.] This project requests unrestricted hours of operation. This modification results in a decrease in potential emissions for the proposed construction. The potential emissions upon completion of this project are 51.07 TPY particulate matter, 33.94 TPY nitrogen oxides, 11.99 TPY carbon monoxide and 28.45 TPY volatile organic compounds and insignificant amounts of SO₂.

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. Susan Machinski 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 at the South District office and 2295 Victoria Avenue, Suite 364, Fort Myers, Florida, 33901.