

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

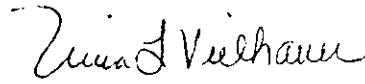
Mr. Michael Haycock, Vice President, Mfg.
Tropicana Products, Inc.
PO Box 338
Bradenton, Florida 34206

DEP File No. 0870007-013-AC
Biogas Combustion
Manatee County

Enclosed is Final Permit Number 0870007-013-AC. This permit authorizes Tropicana Products, Inc. to combust all of the biogas produced by the anaerobic reactor in the existing biogas flare, at its existing facility located at 1001 13th Avenue, Bradenton, Manatee County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

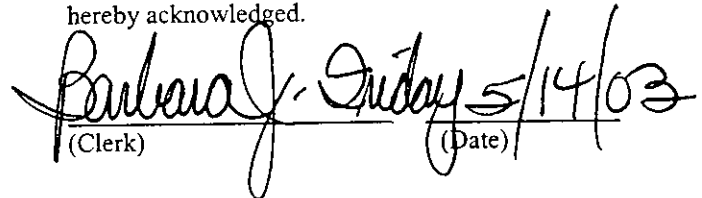
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5/14/03 to the person(s) listed:

Mr. Michael Haycock, Tropicana Products, Inc. *
Mr. Ken Kosky, P.E., Golder
Mr. Eric Peterson, P.E., DEP SWD
Mr. Marion Forthoffer, Manatee Co. EMD

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


(Clerk) (Date) 5/14/03

1 APPLICANT NAME AND ADDRESS

Tropicana Products, Inc.
PO Box 338
Bradenton, Florida 34206

Authorized Representative: Michael Haycock, Vice President, Manufacturing

2 FACILITY DESCRIPTION, PROJECT DETAILS AND RULE APPLICABILITY

The facility is an existing citrus juice processing facility. Included in the facility is an anaerobic reactor, which is a part of its wastewater treatment system. The biogas produced by the anaerobic digester is currently authorized to be burned in the No. 2 and No. 3 Glass Plants; a small steam boiler; and/or, a biogas flare. The No. 2 Glass Plant (Emissions Unit I.D. No. -012) stopped operation in 2000 and the No. 3 Glass Plant (Emissions Unit I.D. No. -014) is scheduled to stop operation the winter of 2003. The closing of the glass plants will mean the biogas can only be burned in the boiler (Emissions Unit I.D. No. -021) and the flare (Emissions Unit I.D. No. -022). The current Title V permit restricts the total heat input for the biogas flare to 18,659 MMBtu per 12 consecutive months and the boiler to 9.96 MMBtu per hour of natural gas and/or biogas. These restrictions are based on the assumption that the glass plants would combust most of the 187,026 MMBtu annual production of biogas. The project allows all of the biogas produced in a 12 consecutive month period to be burned by the Biogas Flare at the anaerobic reactor (Emissions Unit I.D. No. -022) and the emissions cap associated with the combustion of the biogas to be accounted for at the flare and boiler, only. The applicant did not seek any relaxation in currently enforceable conditions in its existing emissions units.

Emissions units addressed by this permit are:

E.U. ID

No. Brief Description

-021 Steam Boiler
-022 Anaerobic Reactor with Biogas Flare

The emissions increase associated with this project was estimated as follows in tons per year. No contemporaneous emissions were assumed in this estimate.

Pollutant	Net Increase ¹	PSD Significance	Subject to PSD?
SO ₂	26.52	40	No

¹ Potential emissions (shown as net increase) were estimated by the Department from the requested allowable emissions rates and the past actual emissions.

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The existing facility is located in an area designated, in accordance with Rule 62-204.340, F.A.C., as attainment or unclassifiable for the criteria pollutants ozone, PM₁₀, carbon monoxide, SO₂, nitrogen dioxide and lead. This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant exceed 100 tons per year (TPY). The Department has previously found that citrus juice processing facilities such as this facility have potential emissions of VOC exceeding 250 TPY.

This facility is not within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1 of Chapter 62-212, F.A.C. Because emissions are greater than 250 TPY for at least one criteria pollutant (VOC), the facility is also an existing Major Facility with respect to Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD). The net increase in emissions of SO₂ does not exceed the PSD significance level of Table 212.400-2, F.A.C. Therefore, the project is not subject to PSD New Source Review (NSR) requirements of Rule 62-212.400(5), F.A.C., for this pollutant.

The applicant stated that this facility is a major source of hazardous air pollutants (HAPs). This project is not subject to a case-by-case MACT determination per Rule 62-204.800(10)(d)2, F.A.C., because it does not result in the construction or reconstruction of a major source of HAP emissions. This project is not subject to any requirements under the National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61 or 63.

3 SOURCE IMPACT ANALYSIS

An impact analysis was not required for this project because it is not subject to the requirements of PSD NSR.

4 EXCESS EMISSIONS

Excess emissions for this emissions unit are specified in Section II of the permit. This permitting action does not change any authorization for excess emissions provided by other Department permits for other emissions units.

5 LIMITS AND COMPLIANCE REQUIREMENTS

The permit maintains the previously established limits on the operation of the boiler and flare, with the exception of the maximum, 12 consecutive month, heat input to the flare. The accounting of sulfur dioxide emissions from combustion of biogas is now calculated at the boiler and flare, only. New limits were imposed on the operation of the gas turbine for fuel sulfur content, nitrogen oxides and carbon monoxide. Additional specific emission limits were not imposed because the potential emissions are well below the PSD significance criteria. The operating limits and the compliance requirements are detailed in Section III of the permit.

6 PRELIMINARY DETERMINATION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations. The Department's preliminary determination is to issue the draft permit to allow the increase in the combustion of biogas by the flare, subject to the terms and conditions of the draft permit.

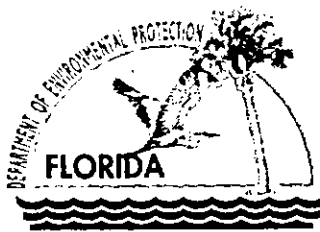
7 FINAL DETERMINATION

An "INTENT TO ISSUE AIR CONSTRUCTION PERMIT" to Tropicana Products, Inc. for their existing citrus juice processing plant located at 1001 13th Avenue, Bradenton, Manatee County was clerked on April 7, 2003. The "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" was published in the Bradenton Herald on April 17, 2003. The Draft Air Construction Permit was available for public inspection at the Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on April 23, 2003.

No comments were received during the fourteen (14) day public comment period. As a result, the permit will be issued, as noticed.

DETAILS OF THIS ANALYSIS MAY BE OBTAINED BY CONTACTING:

Edward J. Svec, Engineer IV
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE

Tropicana Products, Inc.
PO Box 338
Bradenton, Florida 34206

Permit No.	0810007-013-AC
Project	Biogas Combustion
SIC No.	2033, 2037, 2048
Expires:	April 30, 2008

Authorized Representative:

Michael Haycock, Vice President, Mfg.

PROJECT AND LOCATION

This permit authorizes Tropicana Products, Inc. to combust a maximum of 187,026 million Btu per 12 consecutive months in the Anaerobic Reactor with Biogas Flare and the Cleaver Brooks Steam Boiler. The project is necessary due to the shutdown of the No. 2 and No. 3 Glass Plants.

This facility is located at 1001 13th Avenue, Bradenton, Manatee County. The UTM coordinates are: Zone 17; 561.4 km E and 3056.5 km N.

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to construct the emissions unit in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

APPENDICES

The attached appendix is a part of this permit:

Appendix GC General Permit Conditions

Howard L. Rhodes, Director
Division of Air Resource
Management

AIR CONSTRUCTION PERMIT
SECTION I. FACILITY INFORMATION

FACILITY AND PROJECT DESCRIPTION

The facility is an existing citrus juice processing facility. Included in the facility is an anaerobic reactor, which is a part of its wastewater treatment system. The biogas produced by the anaerobic digester is currently authorized to be burned in the No. 2 and No. 3 Glass Plants; a small steam boiler; and/or, a biogas flare. The No. 2 Glass Plant (Emissions Unit I.D. No. -012) stopped operation in 2000 and the No. 3 Glass Plant (Emissions Unit I.D. No. -014) is scheduled to stop operation the winter of 2003. The closing of the glass plants will mean the biogas can only be burned in the boiler (Emissions Unit I.D. No. -021) and the flare (Emissions Unit I.D. No. -022). The current Title V permit restricts the total heat input for the biogas flare to 18,659 MMBtu per 12 consecutive months and the boiler to 9.96 MMBtu per hour of natural gas and/or biogas. These restrictions are based on the assumption that the glass plants would combust most of the 187,026 MMBtu annual production of biogas. The project allows all of the biogas produced in a 12 consecutive month period to be burned by the Biogas Flare at the anaerobic reactor (Emissions Unit I.D. No. -022) and the emissions cap associated with the combustion of the biogas to be accounted for at the flare and boiler, only. The applicant did not seek any relaxation in currently enforceable conditions in its existing emissions units.

The annual potential emissions associated with this project in tons per year is approximately: SO₂, 26.52. The facility information, project scope, emissions and rule applicability are described in detail in the Department's Technical Evaluation and Determination.

REVIEWING AND PROCESS SCHEDULE

February 13, 2003	Received permit application (no application fee required)
February 13, 2003	Application complete
April 7, 2003	Distributed Notice of Intent to Issue and supporting documents
April 17, 2003	Notice of Intent published in the Bradenton Herald

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Permit application
- Department's Technical Evaluation and Determination
- Department's Intent to Issue

AIR CONSTRUCTION PERMIT
SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

The following specific conditions apply to all emissions units at this facility addressed by this permit.

ADMINISTRATIVE

1. Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, phone number 850/488-0114. All documents related to reports, tests, minor modifications and notifications shall be submitted to the Department's Southwest District office at 3804 Coconut Palm Drive, Tampa, Florida 33619-8218, and phone number 813/744-6100.
2. General Conditions: The owner and operator are subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S.; Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297; and, the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Expiration: This air construction permit shall expire on April 30, 2008. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4), 62-4.080, and 62-4.210, F.A.C.]
7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit must be obtained prior to the beginning of construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
8. Title V Operation Permit Required: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A revision to the Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a Title V operation permit at least ninety days prior to

AIR CONSTRUCTION PERMIT
SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Southwest District office. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

OPERATIONAL REQUIREMENTS

9. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department's Southwest District office. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
10. Circumvention: No person shall circumvent any air pollution control device or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
11. Excess Emissions: This permit does not change any authorization for excess emissions provided by other Department permits for other emissions units. The following excess emissions provisions of state rule apply to these emissions units (emissions unit 021, 022) as specified below.
 - (a) Excess emissions resulting from start-up and shutdown are permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period.
 - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited.
 - (c) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

[Rules 62-210.700(1), (4) and (5), F.A.C.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

12. Determination of Process Variables: [Rule 62-297.310(5), F.A.C.]
 - (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured

AIR CONSTRUCTION PERMIT
SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

REPORTING AND RECORD KEEPING REQUIREMENTS

13. Duration of Record Keeping: Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. [Rules 62-4.160(14)(a)&(b) and 62-213.440(1)(b)2.b., F.A.C.]
14. Excess Emissions Report: In case of excess emissions resulting from malfunction, the owner or operator shall notify the Department's Southwest District office within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. A full written report on the malfunctions shall be submitted in a quarterly report if requested by the Department. [Rules 62-4.130 and 62-210.700(6), F.A.C.]
15. Annual Operating Report for Air Pollutant Emitting Facility: The Annual Operating Report for Air Pollutant Emitting Facility shall be completed each year and shall be submitted to the Department's Southwest District office and, if applicable, the appropriate local program by March 1 of the following year. [Rule 62-210.370(3), F.A.C.]

AIR CONSTRUCTION PERMIT

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

The following specific conditions apply to the following emissions units after construction.

E.U.

<u>ID No.</u>	<u>Brief Description</u>
-021	Steam Boiler

The Cleaver Brooks Model No. NCB700-250 package steam boiler is fired with (a) natural gas, (b) biogas, or (c) a mixture of natural gas and biogas. The maximum design heat input rate is 9.96 million Btu per hour.

Sulfur dioxide emissions are controlled by limiting the sulfur content of the biogas.

{Permitting note(s): This emission unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration; and Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Capacity. The maximum heat input to the Steam Boiler shall not exceed 9.96 million Btu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC41-204588]

A.2. Methods of Operation - (i.e., Fuels) The Steam Boiler shall be fired with natural gas and/or biogas only. Biogas and natural gas may be mixed and burned simultaneously. [Rules 62-4.160(2) and 62-213.440(1), F.A.C.; AC41-204588; and, BACT Determination dated October 13, 1992]

Emission Limitations and Standards

A.3. Visible emissions shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%. [Rule 62-296.406(1), F.A.C.]

A.4. Overall SO₂ Emission Limit Cap - Total sulfur dioxide (SO₂) emissions from the Anaerobic Reactor w/Biogas Flare, and the Cleaver Brooks Steam Boiler resulting from the combustion of biogas shall not exceed either of the following:

- 6.9 pounds per hour on a calendar monthly average basis;
- 30.22 tons in any consecutive 12 month period.

[Rule 62-212.400(1)(c), F.A.C.; and, 0810007-013-AC]

AIR CONSTRUCTION PERMIT
SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Test Methods and Procedures

A.5. Test the visible emissions (VE) from the Steam Boiler exhaust, annually on or during the 60 day period prior to March 18 (See Condition A.6.). [Rule 62-297.310(7)(a)(4), F.A.C.]

A.6. Compliance with the emission limitation of Condition A.3 shall be determined using DEP Method 9 contained in Chapter 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. [Chapter 62-297, F.A.C.]

A.7. The sulfur content of the biogas shall be determined in accordance with Tropicana's Environmental Laboratory's Procedure "H₂S Determination Using Sulfur Chemiluminescence Detector", Reference ASTM Method D 5504-94. [Rule 62-4.070(3), F.A.C.; and, AC41-204588 as amended March 27, 1996]

Recordkeeping and Reporting Requirements

A.8. Additional Recordkeeping Requirements - To demonstrate compliance with the overall biogas combustion sulfur dioxide (SO₂) emission limits in this permit, the permittee shall maintain a monthly Biogas SO₂ Emissions Log which shall:

- a. Record daily biogas production (ft³ biogas/day), and weekly H₂S concentration (H₂S ppmv) results. (Note: Biogas flow measured at 70°F.)
- b. Calculate total sulfur dioxide emissions resulting from the combustion of biogas in units of pounds per hour on a monthly average basis using the formula shown below. (Note: H₂S density at 70°F: 0.0892 lb/ft³.)
- c. Calculate total sulfur dioxide (SO₂) emissions resulting from the combustion of biogas in units of tons per month using the formula shown below.
- d. Calculate total sulfur dioxide (SO₂) emissions (tons/year) for the most recent 12 consecutive month period.

The permittee shall complete the calculations in b. through d. by the 15th of the following month. These records shall be recorded in a permanent form suitable for inspection by the Department upon request and shall be retained for at least a five (5) year period.

Formulas:

$$\text{MO. AVG. H}_2\text{S ft}^3/\text{ft}^3 \text{ biogas} = (\text{MO. AVG. H}_2\text{S ppmv}) \times 10^{-6}$$

$$\text{Biogas SO}_2 \text{ emissions (lb/hr)} = (\text{MO. AVG. ft}^3 \text{ biogas/day}) \times (1 \text{ day/24 hr}) \times (0.0892 \text{ lb H}_2\text{S/ft}^3 \text{ H}_2\text{S}) \times (\text{MO. AVG. H}_2\text{S ft}^3/\text{ft}^3 \text{ biogas}) \times (64 \text{ lb SO}_2/34 \text{ lb H}_2\text{S})$$

$$\text{Biogas SO}_2 \text{ emissions (tons/month)} = (\text{Total ft}^3 \text{ biogas/month}) \times (0.0892 \text{ lb H}_2\text{S/ft}^3 \text{ H}_2\text{S}) \times (\text{MO. AVG. H}_2\text{S ft}^3/\text{ft}^3 \text{ biogas}) \times (64 \text{ lb SO}_2/34 \text{ lb H}_2\text{S}) \times (1 \text{ ton SO}_2/2000 \text{ lb SO}_2)$$

[Rule 62-213.440, F.A.C.; and, 0810007-006-AC]

AIR CONSTRUCTION PERMIT

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

The following specific conditions apply to the following emissions units after construction.

E.U.

ID No.

Brief Description

-022

Anaerobic Reactor with Biogas Flare

The Bacardi anaerobic reactor is part of the waste water treatment system. As wastewater is treated in the reactor methane rich biogas is generated. The biogas is compressed and a portion is used to fuel a steam boiler. Any excess biogas is incinerated in a flare (see below).

Air pollutants contained in the biogas, methane (VOC) and H₂S, are controlled by a John Zink Bio-Gas Flare system. This system is used as a flare to burn biogas in the event of a system upset (malfunction) and during periods of excess biogas production. The flare system is equipped with a pilot burner for system startup and flame stabilization. This pilot burner is fired with natural gas or propane. Sulfur dioxide emissions are controlled by limiting the sulfur content of the biogas.

{Permitting note(s): This emission unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration; and Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity.

- a. The maximum heat input rate of biogas burned in the flare shall not exceed 21.35 million Btu per hour (MMBtu/hr).
- b. The total heat input to the biogas flare shall not exceed 187,026 MMBtu/12 consecutive month period.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 0810007-013-AC]

B.2. Methods of Operation - (i.e., Fuels) The only fuels authorized to be burned in the flare are biogas generated in the anaerobic reactor, and natural gas or propane used to fire the pilot burner. Biogas generated as a byproduct of the anaerobic reactor shall be burned as a fuel for the hot water boiler, with the biogas flare used to incinerate excess biogas in the event of a system malfunction or during periods of excess biogas production. [Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

Emission Limitations and Standards

B.3. Visible emissions from the biogas flare shall not be equal to or exceed 20% opacity. [AC41-204587; and, Rule 62-296.320(4)(b), F.A.C.]

B.4. Overall SO₂ Emission Limit Cap - Total sulfur dioxide (SO₂) emissions from the Anaerobic Reactor w/Biogas Flare and the Cleaver Brooks Steam Boiler resulting from the combustion of biogas shall not exceed either of the following:

AIR CONSTRUCTION PERMIT

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

- a. 6.9 pounds per hour on a calendar monthly average basis;
- b. 30.22 tons in any consecutive 12 month period.

[Rule 62-212.400(1)(c), F.A.C.; and, 0810007-013-AC]

Test Methods and Procedures

B.5. Test the visible emissions (VE) from the anaerobic reactor biogas flare annually on or during the 60 day period prior to March 18 (See Condition B.6.). [Rule 62-297.310(7)(a)(4), F.A.C.]

B.6. Compliance with the emission limitation of Condition B.3 shall be determined using DEP Method 9 contained in Chapter 62-297, F.A.C. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C. and 40 CFR 60, Appendix A. [Chapter 62-297, F.A.C.]

B.7. The sulfur content of the biogas shall be determined in accordance with Tropicana's Environmental Laboratory's Procedure "H₂S Determination Using Sulfur Chemiluminescence Detector", Reference ASTM Method D 5504-94. [AC41-204587 as amended March 27, 1996; and, Rule 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

B.8. Additional Recordkeeping Requirements - To demonstrate compliance with the overall biogas combustion sulfur dioxide (SO₂) emission limits in this permit, the permittee shall maintain a monthly Biogas SO₂ Emissions Log which shall:

- a. Record daily biogas production (ft³ biogas/day), and weekly H₂S concentration (H₂S ppmv) results. (Note: Biogas flow measured at 70°F.)
- b. Calculate total sulfur dioxide emissions resulting from the combustion of biogas in units of pounds per hour on a monthly average basis using the formula shown below. (Note: H₂S density at 70°F: 0.0892 lb/ft³.)
- c. Calculate total sulfur dioxide (SO₂) emissions resulting from the combustion of biogas in units of tons per month using the formula shown below.
- d. Calculate total sulfur dioxide (SO₂) emissions (tons/year) for the most recent 12 consecutive month period.

The permittee shall complete the calculations in b. through d. by the 15th of the following month. These records shall be recorded in a permanent form suitable for inspection by the Department upon request and shall be retained for at least a five (5) year period.

Formulas:

$$\text{MO. AVG. H}_2\text{S ft}^3/\text{ft}^3 \text{ biogas} = (\text{MO. AVG. H}_2\text{S ppmv}) \times 10^{-6}$$

$$\text{Biogas SO}_2 \text{ emissions (lb/hr)} = (\text{MO. AVG. ft}^3 \text{ biogas/day}) \times (1 \text{ day/24 hr}) \times (0.0892 \text{ lb H}_2\text{S/ft}^3 \text{ H}_2\text{S}) \times (\text{MO. AVG. H}_2\text{S ft}^3/\text{ft}^3 \text{ biogas}) \times (64 \text{ lb SO}_2/34 \text{ lb H}_2\text{S})$$

AIR CONSTRUCTION PERMIT

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Biogas SO₂ emissions (tons/month) = (Total ft³ biogas/month) x (0.0892 lb H₂S/ft³ H₂S) x (MO. AVG. H₂S ft³/ft³ biogas) x (64 lb SO₂/34 lb H₂S) x (1 ton SO₂/2000 lb SO₂)
[Rule 62-213.440, F.A.C.; and, 0810007-006-AC]

B.9. In order to document compliance with Condition G.1, the permittee shall maintain a record of the hours of operation of the biogas flare. This log shall show the

- a. date, start and end time for flare operation;
- b. the reason for use of the flare (i.e. malfunction, excess biogas, etc.);
- c. the estimated maximum flare biogas heat input rate (MMBtu/hour) during the period of use.

These records shall be recorded in a permanent form suitable for inspection by the Department upon request. [Rule 62-213.440, F.A.C.; and, AC41-204587]

APPENDIX GC
GENERAL PERMIT CONDITIONS [RULE 62-4.160, F.A.C.]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- (a) A description of and cause of non-compliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

APPENDIX GC
GENERAL PERMIT CONDITIONS [RULE 62-4.160, F.A.C.]

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology ();
 - (b) Determination of Prevention of Significant Deterioration (); and
 - (c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information, required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Michael Haycock, Vice President, Mfg.
Tropicana Products, Inc.
P.O. Box 338
Bradenton, Florida 34206

COMPLETE THIS SECTION ON DELIVERY
A. Signature

x Earl E. Albritton

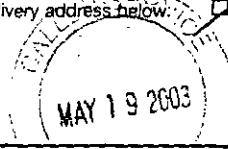
- ☒ Agent
☐ Addressee

B. Received by (Printed Name)

EARL E. ALBRITTON

C. Date of Delivery
D. Is delivery address different from item 1?

If YES, enter delivery address below: ☐ Yes ☒ No


3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

2. Article Number

(Transfer from service label) 7000 2870 0000 7028 1013

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

U.S. Postal Service
CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

Mr. Michael Haycock, Vice President, Mfg.

Postage \$

Certified Fee

Return Receipt Fee
(Endorsement Required)

Restricted Delivery Fee
(Endorsement Required)

Total Postage & Fees \$

Postmark
Here

Sent To

Mr. Michael Haycock, Vice President, Mfg.

Street, Apt. No., or PO Box No.

P. O. Box 338

Bradenton, FL 34206


PS Form 3800, May 2000

See Reverse for Instructions

Memorandum

Florida Department of Environmental Protection

TO: Howard L. Rhodes

FROM: Trina Vielhauer 

DATE: May 5, 2003

SUBJECT: Tropicana Products, Inc.
Biogas Combustion
DEP File No: 0810007-013-AC

Attached for approval and signature is a final air construction permit for Tropicana Products, Inc., Bradenton Plant. The permit allows the biogas previously combusted in the glass furnaces to be combusted by the existing biogas flare. The change was necessary due to the permanent shutdown of the glass furnaces. The applicant did not seek any relaxation in currently enforceable conditions in its other existing emissions units.

No comments were received during the public comment period.

I recommend your approval and signature.

June 12, 2003 is day 90.

TV/es
Attachments