

***** DRAFT PERMIT *****

Date

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PERMITTEE

Tropicana Manufacturing Company, Inc.
6500 Glades Cut-Off Road
Ft. Pierce, FL 34981-4303

Air Permit No. 1110004-015-AC
Permit Expires: *DRAFT*

Authorized Representative:
Mr. John Ekufu, Plant Manager

Tropicana Ft. Pierce Facility
Air Construction Permit
1.6 MW Cogeneration Plant

This is the final air construction permit, which authorizes the addition of a new 1.6 megawatt cogeneration plant, consisting of a Caterpillar (Model G3520C) reciprocating internal combustion engine (RICE) generator set. The cogeneration plant will primarily fire landfill gas. Natural gas will be used as a backup fuel. The cogeneration plant will generate electrical power and produce steam for facility operations.

The proposed plant will be constructed at the Tropicana Ft. Pierce Facility, which produces various citrus products and animal feed (Standard Industrial Classification Code No. 2033). The facility is located in St. Lucie County at 6500 Glades Cut-Off Road, in Ft. Pierce, Florida. The UTM coordinates are Zone 17, 559.61 km East, and 3028.32 km North.

As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

This final permit is organized by the following sections:

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Unit Specific Conditions
- Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This final air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, 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 30 days after this order is filed with the clerk of the Department.

AIR CONSTRUCTION PERMIT (DRAFT)

Executed in West Palm Beach, Florida

DRAFT

Jill S. Creech, P.E.
Southeast District Director

Date

JC/LA/md

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on _____ to the persons listed below.

Mr. John Ekufu, Plant Manager: john.ekufu@pepsico.com
Mr. Scott Davis, HSE, Manager: scott.davis@pepsico.com
Mr. Robert Fox, Sr. Project Manager, ERM: bob.fox@erm.com
Ms. Kathleen Forney, EPA Region 4: (forney.kathleen@epa.gov)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Clerk)

(Date)

SECTION 1. GENERAL INFORMATION (DRAFT)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

Tropicana Products, Inc. operates the Tropicana Fort Pierce facility, SIC No. 2037, located at 6500 Glades Cut-Off Road, Fort Pierce, Florida. The facility consists of two peel dryers with associated waste heat evaporators and an integral wet scrubber, two pellet mills, two pellet coolers equipped with common venturi scrubber, two process steam boilers (each with a maximum heat input rate of 63.4 MMBtu/hour), a packaged fire-tube boiler with maximum heat input rate of 20.9 MMBtu/hour, and a process steam boiler with a maximum heat input rate of 99.8 MMBtu/hour.

The existing facility consists of the following emissions units:

Facility ID No. 1110004	
ID No.	Emission Unit Description
-001	Citrus Peel Dryer No. 1 with Waste Heat Evaporator
-002	Steam Boiler No. 1
-003	Steam Boiler No. 2
-004	Citrus Peel Dryer No. 2 with Waste Heat Evaporator
-006	Steam Package Boiler (Kewanee Classic III Model H3S-500G)
-007	Citrus Pellet Coolers
-008	Process Steam Boiler

Proposed Project

This final construction permit will authorize Tropicana Manufacturing Company, Inc., to add to the facility, a new 1.6 megawatt Cogeneration Plant, consisting of a Caterpillar (Model G3520C) reciprocating internal combustion engine (RICE) generator set. The cogeneration plant will primarily fire landfill gas. Natural gas will be used as a backup fuel. This cogeneration plant will generate electrical power and produce steam for facility operations.

This project will add Emission Unit 016 to the facility.

Facility ID No. 1110004	
ID No.	Emission Unit Description
-016	Cogeneration Plant consisting of a Caterpillar (Model G3520C) engine/generator.

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is 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(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

1. Permitting Authority: The permitting authority for this project is the Florida Department of Environmental Protection, Southeast District Office. The mailing address is 400 North Congress Avenue, Suite 200, West Palm Beach, Florida 33401. All documents related to applications for permits to operate an emissions unit shall be submitted to the Southeast District Office.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the District Office. The mailing address and phone number of the District Office is: 400 North Congress Avenue, Suite 200, West Palm Beach, Florida 33401 and Phone Number. 561/681-660.
3. Appendices: The following Appendices are attached as part of this permit:
 - a. Appendix A. Citation Formats and Glossary of Common Terms
 - b. Appendix B. General Conditions
 - c. Appendix C. Common Conditions
 - d. Appendix D. Common Testing Requirements
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units 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.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: 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. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Source Obligation:

At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]
8. Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit revision to incorporate this emissions unit is required for regular operation. The permittee shall apply for a Title V air operation permit

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

at least 90 days prior to 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 appropriate Permitting Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
-009	Cogeneration Plant consisting of a Caterpillar (Model G3520C) engine/generator.

EQUIPMENT

A.1. The permittee is authorized to install a new 1.6 megawatt cogeneration plant containing a Caterpillar engine/generator unit, Model G3520C, reciprocating internal combustion engine (RICE).

[Application No. 1110004-015-AC]

OPERATING RESTRICTIONS

A.2. The permittee shall comply with the applicable regulations, emission limitations and operating limitations of 40 CFR Part 63, subpart ZZZZ and 40 CFR 60, subpart JJJJ.

A.3. Authorized Fuel: Landfill gas will be the primary fuel and natural gas will be used as a backup fuel. The permittee is allowed to cofire a blend of the two fuels. The cogeneration plant (stationary RICE) shall combust landfill gas equivalent to 10 percent or more of the gross heat input on an annual basis and shall meet the initial notification requirements. Operating at less than 10 percent gross heat input of landfill gas will subject the engine to emission limitations and operating limitations of Subpart ZZZZ. The operator shall modify the permit before commencing operation at less than 10 percent gross heat input on an annual basis.

[40 CFR 63.6590(b)(2) and Rule 62-210.200(PTE), F.A.C.]

A.4. Compliance Date: The permittee shall comply with the applicable regulations, emissions limitations and operating limitations of 40 CFR 63, subpart ZZZZ upon **startup**.

[40 CFR 63.6595(a)(3)]

A.5 Hours of Operation: The hours of operation are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

OPERATING LIMITATIONS

A.6. General Compliance Requirements: The permittee shall at all times operate and maintain the emissions unit, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b)]

A.7. The permittee shall operate and maintain the stationary Spark Ignition Internal Combustion Engine (SI ICE) that achieves the emission standards as required in 40 CFR 60.4233(e), Table 1 below, over the entire life of the engine.

Table 1 to Subpart JJJJ of Part 60—NO_x, CO, and VOC Emission Standards, Stationary SI Landfill/Digester Gas Engines.

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards ^a							
			g/HP-hr			ppmvd at 15% O ₂				
			NO _x	CO	VOC ^d	NO _x	CO	VOC ^d		

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

Landfill/Digester Gas Lean Burn		After 7/1/2010	2.0	5.0	1.0	150	610	80
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^dFor purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

[40 CFR 60.4234]

A.8. The permittee elected to maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions. Records of conducted maintenance to demonstrate compliance shall be kept; but, no performance testing is required. The permittee shall also meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as they apply to the emissions unit. If engine settings are adjusted according to and consistent with the manufacturer's instructions, your stationary SI ICE will not be considered out of compliance.

[40 CFR 60.4243(a)(1)]

A.9. If the permittee fails to operate and maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions as required in Specific Condition A.8, the engine will be considered a non-certified engine, and compliance shall be demonstrated according to the following: The owner shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. All performance testing shall comply with the requirements specified in 40 CFR 60.4244.

[40 CFR 60.4243(a)(iii)]

{Note: The permittee shall keep documentation that the engine meets the emission standards if the certified engine is operating in a non-certified manner.}

A.10. Table 3 (below) shows which parts of the General Provisions (40 CFR 60, subpart A) that apply to this facility.

Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

General provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4248.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4245.
§60.8	Performance tests	Yes	Except that §60.8 only applies to owners and operators who are subject to performance testing in subpart JJJJ.
§60.9	Availability of information	Yes	

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	Yes	Requirements are specified in subpart JJJJ.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	No	
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

[40 CFR 60.4246]

COMPLIANCE

A.11. The permittee elected to meet emission standards specified in 60.4233(e) Specific Condition A.7 by purchasing an engine certified according to 40 CFR Part 1048. The engine must be installed and configured according to the manufacturer's specifications in Specific Condition A.8.

[40 CFR 60.4243(b)(1)]

{NOTE: The permittee shall keep documentation that the engine meets the emission standards if the certified engine is operating in a non-certified manner and subject to §60.4243(a)(2), documentation}

MONITORING TESTING

A.12. The permittee shall monitor and record the fuel usage daily with a separate fuel meters to measure the volumetric flow rate of each fuel. In addition, the stationary RICE must be operated in a manner which reasonably minimizes HAP emissions.

[40 CFR 63.6625(c)]

RECORDKEEPING

A.13. The permittee shall maintain the records of the daily fuel usage of landfill gas and natural gas required in Specific Condition A.12.

[40 CFR 63.6655(c)]

A.14. The permittee shall maintain records in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site.

[40 CFR 63.6660 (a)-(c)]

A.15. The permittee shall meet the following notification, reporting and recordkeeping requirements:

- (1) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

(2) Maintenance conducted on the engine.

(3) If the stationary SI ICE is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI ICE is not a certified engine or is a certified engine operating in a non-certified manner the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance

[40 CFR 60.4245(a)(1)-(4)]

{NOTE: 40 CFR 60.4245(a)(4) Specific Condition A.15(4) only applies if the permittee fails to operate and maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions, as required in Specific Condition A.8.

REPORTING

A.16. Initial Notification: The permittee shall submit an initial notification not later than **120 days after commencing operations**. The notification should include the information in [(63.9(b)(2)(i) through (v)] 40 CFR 63 Subpart A, and a statement that your stationary RICE has no additional requirements.

[40 CFR 63.6645(c),(f)]

A.17. The permittee shall submit a report annually by the date specified in Table 7 of subpart ZZZZ. The report shall contain the following:

- (1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or natural gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.
- (2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.
- (3) Any problems or errors suspected with the meters.

[40 CFR 63.6650(a)(g)]

A.18. Reporting Requirements: The Annual Compliance report shall contain the following information:

- (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.
- (4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.
- (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

[40 CFR 63.6650(c)(1)-(5)]