Tropicana

VIA OVERNIGHT DELIVERY
January 8, 2001

Mr. Joseph Kahn, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32339-2400

RE: PERMIT NO. 0810007-003-AV

Dear Mr. Kahn:

Enclosed are four copies of an application for a minor source permit at the above-referenced Title V facility. This application requests approval for Tropicana to bring a mobile steam-generating unit on site during periods when additional steam is needed at the facility. These conditions would exist when either of the existing steam generating units at the facility (Auxiliary Boiler or Cogeneration Turbine) is inoperable. It also would provide Tropicana the flexibility to reduce operation of its Cogeneration facility during periods of high natural gas pricing, such as exists today.

Under separate cover, Tropicana has submitted a request for an emergency order to operate this unit. That request was made due to the severe cold weather we are experiencing, which is limiting our ability to operate the Cogeneration Turbine, coupled with the requirement to salvage freeze-damaged fruit during the next four to seven weeks. Obviously, it would be in our best interest to have this unit permanently permitted, and whatever you can do to expedite this process would be greatly appreciated.

If you have any questions, please contact me at 941-742-2748.

Sincerely,

Douglas E. Foster
Director, Corporate Environmental & Safety

D529/jb

Enclosures
cc: Karen Collins-Manatee Co. Env. Management Dept. (w/enc.)
Deborah Getzoff-FDEP, SWD
G. L. Kissel, P.E., FDEP, SWD
Kennard Kosky, P.E.-Golder Associates
Bill Thomas, P.E.-FDEP, SWD
George Cassady-TPI
Tom Hovanec-TPI

APPLICATION FOR AIR PERMIT
INSTALLATION OF A STANDBY
BOILER FOR TROPICANA PRODUCTS, INC.
BRADENTON CITRUS PROCESSING FACILITY

Prepared For:

Tropicana Products, Inc.
Bradenton Citrus Processing Plant
1001 13th Avenue, East
Bradenton, Manatee 34208

Prepared By:

Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

December 2001
9837588Y/F2

DISTRIBUTION:
4 Copies - FDEP
2 Copies - Tropicana Products, Inc.
1 Copy - Golder Associates Inc.

TABLE OF CONTENTS

PART I

APPLICATION FOR AIR PERMIT
LONG FORM

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **Tropicana Products, Inc.**	
2. Site Name: **Bradenton Citrus Processing Facility**	
3. Facility Identification Number: **0810007** [ ] Unknown	
4. Facility Location: Street Address or Other Locator: **1001 13th Avenue** City: **Bradenton** County: **Manatee** Zip Code: **34208**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **Douglas E. Foster, Manager, Environmental Affairs**
2. Application Contact Mailing Address: Organization/Firm: **Tropicana Products, Inc.** Street Address: **P.O. Box 338** City: **Bradenton** State: **FL** Zip Code: **34206**
3. Application Contact Telephone Numbers: Telephone: (**941**) **742 - 2748** Fax: (**941**) **749 - 3768**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	1-10-01
2. Permit Number:	0810007-008-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

[ ] Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number:_____

[ ] Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number:_____

Operation permit number to be revised:_____

[ ] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected:_____

[ ] Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised:_____

Reason for revision:_____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[X] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Donald Antenore, Vice President, Manufacturing
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **Tropicana Products, Inc.**
   Street Address: **P.O. Box 338**
   City: **Bradenton** State: **FL** Zip Code: **34206**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (**941**) **742 - 2023** Fax: (**941**) **749 - 2049**
4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [ ], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Signature

01/07/01
Date

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **Kennard F. Kosky**
   Registration Number: **14996**
2. Professional Engineer Mailing Address:
   Organization/Firm: **Golder Associates Inc.**
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653-1500**
3. Professional Engineer Telephone Numbers:
   Telephone: (**352**) **336 - 5600** Fax: (**352**) **336 - 6603**

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [**X**], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

1/5/01
Date

(seal) 74

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
023	Standby Boiler	AC1D	

Application Processing Fee

Check one: [ ] Attached - Amount: $: _____ [X] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

   Installation of one 70,000 lb/hr (nominal steam rating) trailer-mounted steam boiler. The boiler will be used to replace or supplement steam generated by the existing cogeneration unit (Emission Unit No. 016) and the auxiliary boiler (Emission Unit No. 015). The unit is capable of firing either natural gas or No. 2 fuel oil. The unit includes a low NO_X burner.

2. Projected or Actual Date of Commencement of Construction: **1 Feb 2001**

3. Projected Date of Completion of Construction: **1 Feb 2001**

Application Comment

The boiler will be used as a supplemental source of steam. Operation of the boiler will supplement steam generated by the cogeneration unit and auxiliary boiler. The facility holds a Title V permit and, therefore, a construction permit fee is not required pursuant to Rule 62-4.050(4)(a)2. While the emission unit will have potential emissions of less than PSD thresholds for a major modification. Therefore PSD review is not required.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **17** East (km): **561.4** North (km): **3056.5**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): **27 / 37 / 52** Longitude (DD/MM/SS): **80 / 22 / 33**			
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment (limit to 500 characters): **See Attachment Part II.**			

Facility Contact

1. Name and Title of Facility Contact: **Mr. Thomas P. Hovanec, Manager, Environmental and Safety Operations**
2. Facility Contact Mailing Address: Organization/Firm: **Tropicana Products, Inc.** Street Address: **1001 13th Street** City: **Bradenton** State: **FL** Zip Code: **34208**
3. Facility Contact Telephone Numbers: Telephone: (**941**) **742 - 2788** Fax: (**941**) **742 - 2698**

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source?	[ ] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?	
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?	
5. [ ] Synthetic Minor Source of HAPs?	
6. [X] One or More Emissions Units Subject to NSPS?	
7. [ ] One or More Emission Units Subject to NESHAP?	
8. [ ] Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters): **NSPS Subpart DC applies to the standby steam boiler**	

List of Applicable Regulations

Facility emissions covered under existing Title V permit, no additional facility or emissions unit applicable requirements as a result of the proposed change.

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [X] Attached, Document ID Part II [ ] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [ ] Attached, Document ID:_____ [X] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [X] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____ [X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____ [X] Not Applicable

12. Identification of Additional Applicable Requirements:
    [ ] Attached, Document ID:_____ [X] Not Applicable

13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [X] Not Applicable

14. Compliance Report and Plan:
    [ ] Attached, Document ID:_____ [X] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [ ] Attached, Document ID:_____ [X] Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Standby 70,000 lb/hr (Steam) Boiler

4. Emissions Unit Identification Number: [ ] No ID
ID: [X] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
C	**Feb-01**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

The standby boiler will be used as a supplementary supply of process steam. The boiler will fire natural gas and no. 2 distillate oil (backup) and is subject to 40 CFR Subpart Dc.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

   Low NO_X Burner - Gas/Oil

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: **TBD**
   Manufacturer: **TBD** Model Number: **TBD**
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:			99	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	7	days/week
	52	weeks/year	8,760	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Max heat input will be up to 99 MMBtu/hr, which is the maximum for both natural gas and distillate fuel oil. The actual heat input will vary depending on supplier. The boiler will be operated to supplement steam generated from the cogeneration unit and auxiliary boiler.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment TB-EU1-C for operational requirements	

ATTACHMENT TB-EU1-C

APPLICABLE REQUIREMENTS LISTING

EMISSION UNIT: Temporary Steam Boiler

FDEP Rules:

Stationary Sources-General:

62-210.650	- Circumvention
62-210.700(1)	- Excess Emissions; malfunction; 2-hrs/24-hrs
62-210.700(2)	- Excess Emissions; FFFSG; startup/shutdown
62-210.700(3)	- Excess Emissions; FFFSG; soot blowing/load change
62-210.700(4)	- Excess Emissions; Excludes poor maintenance
62-210.700(6)	- Excess Emissions; reporting

Stationary Sources-Emission Monitoring:

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)1.	- Applicable Test Procedures; Sampling time
62-297.310(4)(b)	- Sample Volume
62-297.310(4)(c)	- Required Flow Rate Range-PM
62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities - general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)1.	- Renewal
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.b.	- Annual Test
62-297.310(7)(a)5.	- PM exemption if < 400 hrs/yr
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(8)	- Test Reports

Stationary Sources - BACT Steam Generators < 250 mmBtu/hr

62-296.406(2)	- Particulate Matter
62-296.406(3)	- Sulfur Dioxide

Federal Rules:

NSPS General:

40 CFR 60.7(b)	- Notification and Recordkeeping (startup/shutdown/malfunction)
40 CFR 60.7(f)	- Notification and Recordkeeping (maintain records)

40 CFR 60.8(c)	- Performance Tests (representative conditions)
40 CFR 60.8(e)	- Performance Tests (test facilities required)
40 CFR 60.8(f)	- Performance Tests (test runs)
40 CFR 60.11(a)	- Compliance (ref. S.60.8 Subpart; other than opacity)
40 CFR 60.11(b)	- Compliance (opacity determined EPA Method 9)
40 CFR 60.11(c)	- Compliance (opacity; excludes startup/shutdown/malfunction)
40 CFR 60.11(d)	- Compliance (maintain air pollution control equipment)
40 CFR 60.11(f)	- Compliance (opacity; ref. S.60.8)
40 CFR 60.12	- Circumvention

NSPS Subpart Dc:

40 CFR 60.42c(d)	- SO_2 Fuel Oil Combustion Limits
40 CFR 60.42c(h)	- Fuel Oil Sulfur Content Certification
40 CFR 60.43c(c)	- Opacity Limits
40 CFR 60.43c(d)	- Opacity Limits during startup, shutdown, or malfunction
40 CFR 60.44c(g)	- Demonstration of compliance with fuel oil sulfur limits
40 CFR 60.45c(a)(7)	- Method 9 testing
40 CFR 60.46c(d)(2)	- Fuel sampling
40 CFR 60.48c(a)	- Notification requirements
40 CFR 60.48c(d)	- Report submittal
40 CFR 60.48c(e)(11)	- Fuel oil supplier certification requirements
40 CFR 60.48c(f)(1)	- Fuel oil supplier certification information
40 CFR 60.48c(g)	- Fuel combustion records

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Exhausts through a single stack.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 21 feet	7. Exit Diameter: 4 feet
8. Exit Temperature: 500 °F	9. Actual Volumetric Flow Rate: 36,000 acfm	10. Water Vapor: 8.5 %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters): **Stack parameters are typical for the type of trailer-mounted boiler.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Natural Gas < 100 MMBtu/hr**		
2. Source Classification Code (SCC): **1-02-006-02**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.097**	5. Maximum Annual Rate: **776**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1020**
10. Segment Comment (limit to 200 characters): **Maximum hourly based on 1,020 Btu/cf (HHV) for the standby boiler. Maximum annual based on 8,000 hr/yr.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Distillate (No. 2) Fuel Oil**		
2. Source Classification Code (SCC): **1-02-005-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **0.728**	5. Maximum Annual Rate: **1,048.3**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **136**
10. Segment Comment (limit to 200 characters): **Million Btu per SCC unit = 136; based on 6.83 lb/gal; HHV 19,910 Btu/lb, ISO conditions, maximum annual rate based on a maximum of 1,440 hours of oil firing per year.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			
SO_2			EL
NO_x	024		EL
CO			EL
PM_{10}			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.5** lb/hour **1.7** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **VE <20% opacity**	4. Equivalent Allowable Emissions: **1.5** lb/hour **1.1** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 9**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Oil firing, 1,440 hr/yr. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.5** lb/hour **1.7** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **VE < 10% opacity**	4. Equivalent Allowable Emissions: **0.2** lb/hour **0.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 9**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Gas Firing; 8,000 hr/yr. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **29.7** lb/hour **22.3** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.5% Sulfur Oil maximum**	4. Equivalent Allowable Emissions: **29.7** lb/hour **21.4** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Sampling**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Oil Firing; 1,440 hr/yr. Average sulfur content is 0.3% sulfur. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control:

3. Potential Emissions: **29.7** lb/hour **22.3** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**

8. Calculation of Emissions (limit to 600 characters):

See Attachment Part II.

9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):

Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **See Comment**	4. Equivalent Allowable Emissions: **0.3** lb/hour **1.2** tons/year

5. Method of Compliance (limit to 60 characters):

Pipeline Natural Gas

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):

Pipeline natural gas, 1 g/100 cf, 8,000 hr/yr, See Attachment Part II.

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **12.9** lb/hour **39.8** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor;. Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.13 lb/MMBtu**	4. Equivalent Allowable Emissions: **12.9** lb/hour **9.3** tons/year
5. Method of Compliance (limit to 60 characters): **Manufacturer Certification**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Annual Allowable Emissions based on 1,440 hr/yr. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **NO_X**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **12.9** lb/hour **39.8** tons/year	4. Synthetically Limited? [**X**]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/MMBtu**	4. Equivalent Allowable Emissions: **9.9** lb/hour **39.6** tons/year
5. Method of Compliance (limit to 60 characters): **Manufacturer Certification**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Annual Allowable Emissions based on 8,000 hr/yr. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **14.9** lb/hour **59.4** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 8,000 hr/yr gas firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.15 lb/MMBtu**	4. Equivalent Allowable Emissions: **14.9** lb/hour **10.7** tons/year
5. Method of Compliance (limit to 60 characters): **Manufacturer Certification**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Oil firing for 1,440 hr/yr. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **14.9** lb/hour **59.4** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 8,000 hr/yr gas firing.**	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.15 lb/MMBtu**	4. Equivalent Allowable Emissions: **14.9** lb/hour **59.4** tons/year
5. Method of Compliance (limit to 60 characters): **Manufacturer Certification**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on 8,000 hr/yr gas firing. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.5** lb/hour **1.7** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **VE < 20% opacity**	4. Equivalent Allowable Emissions: **1.5** lb/hour **1.1** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 9**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Oil firing, 1,440 hr/yr. See Attachment Part II.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **1.5** lb/hour **1.7** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference: **Vendor; Golder 2000.**	7. Emissions Method Code: **2**
8. Calculation of Emissions (limit to 600 characters): **See Attachment Part II.**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr based on oil firing. TPY based on the maximum possible boiler operation of 6,160 hr/yr gas firing and 1,440 hr/yr oil firing.**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **VE < 10% opacity**	4. Equivalent Allowable Emissions: **0.2** lb/hour **0.8** tons/year
5. Method of Compliance (limit to 60 characters): **EPA Method 9**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Gas firing; 8,000 hr/yr. See Attachment Part II.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Annual VE Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **VE of 20% proposed for distillate oil firing. VE of 10% proposed for gas firing. Excess opacity based on Rule 62-210.700.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [ ] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: Part II [ ] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [ ] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [ ] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[ ] Not Applicable

PART II

SUPPORTING INFORMATION

1.0 INTRODUCTION

Tropicana Products, Inc. is proposing to install and operate one standby steam boiler at the existing Bradenton Citrus Processing Plant. The steam boiler will operate to supplement steam generated by the existing auxiliary boiler and combined cycle combustion turbine. The standby boiler will be operated when either of the existing steam sources are at reduced operating loads or not operating. The boiler will be a trailer-mounted boiler that will be rented as necessary to provide supplemental steam. The standby boiler will be fired primarily with pipeline quality natural gas and distillate fuel oil will be used as a backup.

1.1 EXISTING FACILITY AND PROPOSED STANDBY STEAM BOILER

The Tropicana facility is located at 1001 13th Avenue East, Bradenton, Florida. The existing industrial complex includes glass manufacturing, and citrus processing that includes juice extracting, processing, packaging, warehousing, and distribution. Fruit is graded and carried to an extractor room where the juice is removed and pumped to either carton filling, glass filling, plastic filling, block freezing, aseptic storage or to evaporators for concentrate production.

The plant contains three citrus feed mills, four citrus pellet mills (including two pellet coolers and associated pellet, bulk cooling reels, and Ross coolers), two glass plants, cogeneration facility (combustion turbine, heat recovery steam generator (HRSG), duct burner, auxiliary boiler, sanitary process steam boiler (used to produce 5-fold citrus oil), and a wastewater treatment system that includes a package steam boiler and an anaerobic reactor with a biogass flare.

The proposed standby steam boiler will be rented on a temporary basis as needed for supplying steam to supplement or replace the steam generated by the auxiliary boiler and cogeneration unit. The standby boiler will have a nominal steam rating of 70,000 pounds (lb) of steam per hour. A maximum heat input of 99 million British thermal units per hour (MMBtu/hr) is proposed to envelope the possible boilers that can be rented. The fuel will be primarily pipeline-quality natural gas with No. 2 fuel oil as a backup fuel. The fuel oil will contain a maximum of 0.5 percent sulfur and an average of 0.3 percent sulfur.

1.2 STANDBY STEAM BOILER EMISSION ESTIMATION

The estimated hourly and annual criteria pollutant emissions from the standby steam boiler are provided in Table 1. The boiler emissions are based on a total heat input rate of 99.0 MMBtu/hr and a total fuel usage rate of 97,059 standard cubic feet per hour of pipeline quality natural gas or 728 gallons per hour of No. 2 fuel oil with 0.05-percent sulfur. Actual hourly emissions are expected to be lower since the capacity of the boilers available for this purpose have a heat input rate of less than 99 mmBtu/hr.

The standby boiler emissions are based on 8,000 hours per year of operation when firing natural gas. Up to 1,440 hours per year (60 days) of distillate fuel oil firing is being proposed as the back-up fuel requirements. Specific vendor information for the standby steam boiler is provided in Attachment A.

The operation of the boiler is proposed to be limited by the equivalent heat input of operating 8,000 hr/yr on natural gas of 792,000 mmBtu/yr (99 mmBtu/hr times 8,000 hr/yr). Distillate oil usage is proposed as a backup fuel up to an equivalent of 1,440 hr/yr or 142,560 mmBtu/yr (99 mmBtu/hr times 1,440 hr/yr). In the event distillate oil is burned, the maximum amount of gas authorized would be decreased by a factor of 1.3. For example, if 50,000 mmBtu/yr of distillate oil were burned, then the annual amount of gas authorized would decrease by 65,000 mmBtu/yr (1.3 times 50,000 mmBtu/yr). This schedule is being proposed to make the NO_x emissions equivalent and less than 40 TPY (i.e., the PSD Threshold; see Section 1.3).

1.3 APPLICABLE REQUIREMENTS AND PERMITTING CONDITIONS

A modification is defined in Rule 62-210.200 Florida Administrative Code (F.A.C.) as any physical change in, or a change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Clean Air Act. A modification to a major source of air pollution, such as the Tropicana Bradenton Citrus Processing Plant, may be subject to review under the

Department's Prevention of Significant Deterioration (PSD) rules codified in Rule 62-212.400 F.A.C.

The proposed fuel use limitations will limit the potential emission rates for the standby steam boiler to be less than the PSD significant emission rates in Table 62-212.400-2 in Rule 62-212.400 F.A.C. Therefore, PSD review would not apply. The Tropicana Bradenton facility will record the fuel use and hours of operation for the standby boiler to demonstrate compliance.

The standby boiler will also be subject to specific standards in 62-296.406, F.A.C., applicable to fossil fuel steam generators with less than 250 MMBtu/hr heat input. The maximum heat input rate of the proposed standby steam boiler is 99 MMBtu/hr and therefore will be subject to this rule. F.A.C. 62-296.406(1) requires that visible emissions from the standby boiler will be limited to 20-percent opacity, except for either one 6-minute period per hour during which opacity shall not exceed 27 percent, or one 2-minute period per hour during which opacity shall not exceed 40 percent. Method 9 will be used demonstrate compliance with the opacity limits on an annual basis. Rules 62-296.406(2) and (3) require that best achievable control technology (BACT) for PM and SO_2 be applied to the standby steam boiler. The BACT requirements and analysis are presented in Section 2.0.

The standby steam boiler will be subject to 40 CFR 60, Subpart Dc, *New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units*. According to the rule, a boiler less than 100 MMBtu/hr may emit no more than 0.5 pounds/MMBtu of SO_2, or as an alternative, must burn fuel oil with a maximum sulfur content of 0.50 percent. In addition, the boiler will be subject to a 20-percent opacity limitation, except up to 6 minutes per hour, the opacity must not exceed 27 percent. The standby boiler will comply with these requirements by testing the fuel oil sulfur content and performing an annual Method 9 test for opacity.

2.0 BACT ANALYSIS

2.1 REQUIREMENTS

The control technology review requirements of the state regulations require that all applicable state emissions-limiting standards are met, and that BACT be applied to control emissions from the source. Rule 62-296.406, F.A.C., requires BACT for PM and SO_2. BACT is defined in Rule 62-210.200(42) as:

> An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant. If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.

The BACT requirements are intended to ensure that the control systems incorporated in the design of a proposed facility reflect the latest in control technologies used in that particular industry and take into consideration existing and future air quality in the vicinity of the proposed facility. BACT must, as a minimum, demonstrate compliance with NSPS for a source (if applicable). An evaluation of the air pollution control techniques and systems, including a cost-benefit analysis of alternative control technologies capable of achieving a higher degree of emission reduction than the proposed control technology, is required. The cost-benefit analysis requires the documentation of the materials, energy, and economic penalties associated with the proposed and alternative control systems, as well as the environmental benefits derived from these systems. A decision on BACT is to be based on sound judgement, balancing environmental benefits with energy, economic, and other impacts (EPA, 1978).

2.2 PROPOSED BACT FOR SO_2

There are no technically feasible methods for controlling the emissions of SO_2 from small steam boilers other than the inherent quality of the fuel. Therefore, the proposed BACT for SO_2 emissions from the standby steam boiler will be based on burning pipeline quality natural gas and very low sulfur fuel oil. Tropicana Bradenton will use pipeline quality natural gas as the primary fuel with a sulfur content of 1 grain per 100 cubic feet. Distillate fuel oil will be used as a backup fuel with a maximum sulfur content of 0.5 percent, which is currently authorized for the auxiliary boiler.

2.3 PROPOSED BACT FOR PM

PM emissions from the standby steam boiler are estimated to be less than 2 TPY. Due to the low emissions, no control equipment is recommended for PM. The proposed BACT is to use No. 2 fuel oil with a maximum sulfur content of 0.5 percent. It is proposed that no further particulate controls are necessary for the proposed standby boiler.

Table 1. Stand-By Boiler Criteria Emissions (nominal 70,000 lb/hr steam)

	Gas Firing		Oil Firing		Maximum Tons per year[b]	
	(lb/MMBtu)[a]	(lb/hr)	(lb/MMBtu)[a]	(lb/hr)	(Case A)	(Case B)
PM as TSP	0.002	0.20	0.015	1.49	0.79	1.68
PM10	0.002	0.20	0.015	1.49	0.79	1.68
NO_x	0.1	9.90	0.13	12.87	39.60	39.76
SO2	0.003	0.30	0.3	29.70	1.19	22.30
CO	0.15	14.85	0.15	14.85	59.40	56.43
VOCs	0.004	0.40	0.004	0.40	1.58	1.50

Heat Input:

Gas (MMBtu/hr) = 99 MMBtu/hr - Gas

Oil (MMBtu/hr) = 99 MMBtu/hr - Oil

[a] Vendor provided values

[b] Maximim emission cases:

	Number of Hours for Operation	
Operation	Gas Only	Gas and Oil
100 % Load - Gas	8,000	6,160
100 % Load - Oil	0	1,440
Total hours	8,000	7,600

ATTACHMENT A

MANUFACTURER INFORMATION FOR
THE STANDBY STEAM BOILER
(EXAMPLE OF TYPICAL TRAILER-MOUNTED BOILER)

INDECK®

Indeck Power Equipment Company
1111 S. Willis Avenue
Wheeling, IL 60090

To:	**Steve Maltby**
Company:	**Golder Ass.**
Phone:	**352-336-5600**
Fax:	**352-336-6603**
From:	**John P. Sullivan**
Title:	**National Sales Engineer**
Phone:	**(847) 541-8300**
Fax:	**(847) 541-9984**
E-Mail:	jsullivan45@compuserve.com
Date:	**10/25/00**
Total Pages Sent:	**1**

RE: 70,000 PPH Rental Boiler Emissions

RE: INDECK QUOTE DATED 8/9/00

NATURAL GAS :		NO. 2 OIL:	
NOX:	84 PPM	NOX:	101 PPM
CO:	200 PPM	CO:	200 PPM
PARTICULATE:	.01 LBS/MM/BTU	PARTICULATE:	.05 LBS/MM/BTU
VOC:	.004 LBS/MM/BTU	VOC:	.004 LBS/MM/BTU
SO2:	.003 LBS/MM/BTU	SO2	.164 LBS/MM/BTU
SOX:	.001 LBS/MM/BTU	SOX:	.151 LBS/MM/BTU

INDECK POWER EQUIPMENT COMPANY • 1111 SOUTH WILLIS AVENUE • WHEELING, ILLINOIS 60090-5841
847/541-8300 • TELEX 28-3544 • FAX 847/541-9984

INDECK®

August 9, 2000

Facsimile No. 941-742-2900
Tropicana
1001 – 13th Avenue East
Bradenton, Florida 34208

Attention: Mr. Tom Williams
Phone: 941-742-2740

Reference: Telephone Conversation of August 9, 2000

Subject: Rental Boiler

Dear Mr. Williams:

In accordance with your request, I am pleased to provide the following for your review and consideration.

70,000 PPH Trailer Mounted Boiler

One (1) 70,000 lb./hr. Indeck trailer mounted steam system, designed and built to the ASME Power Boiler Code for 350 psig design pressure with an operating pressure range of 125-335 psig. The unit is arranged to fire either natural gas requiring regulated gas pressure of 10 psig at the trailer connection or #2 fuel oil with either fuel requiring a gas pilot. The unit is complete with the manufacturer's standard trim, Low NOx burner, electric single point positioning combustion controls, Industrial Risk Insurance (IRI) approved fuel trains, automatic relay type non-recycling burner management system and a forced draft fan, coupled to a 75 HP, TEFC drive motor requiring 480 volts, 3-phase, 60 Hertz power. The following list of auxiliary equipment is shipped loose on the trailer for field mounting by others.,

a. 6 ft. high stack & transition assembly.
b. 8" - 300 psig flanged steam non-return valve.
c. ASME safety relief valves set at 350 psig.
d. Bottom drum tandem blowdown valves.
e. Flanged upper forced draft fan housing.

The above 70,000 lb./hr. steam boiler is mounted on a 52 ft. long specially designed trailer.

INDECK

Your net price for the above described trailer mounted boiler system is $24,000.00/month, f.o.b. Wheeling, Illinois.

Estimated freight charges to Bradenton, Florida and return are $4,400.00 each way.

The above mobile steam system is currently in-stock and available for shipment. All equipment is offered subject to prior rental/sale.

After the equipment has been properly installed by others and is ready for operation, we do require that an Indeck Service Technician supervise the initial start-up by your operators and train your operating personnel. This service will be billed at $750.00/8 hour day (straight time) plus travel and expenses for the Engineer on a portal to portal basis. Expenses will be billed at cost plus 15% supported by third party receipts.

WARRANTY

After start-up, should any failures of the following types occur, they will be repaired at **no cost** to you.

Bearings	Refractory
Blowers	Safety Valves
Controls	Tubes
Electric Motors	Valves
Gauges	Water Columns
Leaking Gaskets	Wiring

The above guarantee includes all parts and labor and extends throughout the entire rental period.

Also, a full rental credit will be allowed for all down days.

Users are responsible for:

A. Returning defective part(s) within 30 days of shipment of warranty part(s).
B. Indeck Power Equipment Company requires that ABMA guidelines are maintained within the steam drum of our boilers.
C. Proper care and maintenance of the equipment
D. Providing competent operators

INDECK

August 9, 2000

E. A temporary shelter to protect the burner and controls from the environment. The shelter must be substantial enough to protect from rain and freezing temperatures. If necessary, a heater needs to be supplied to keep the burner and controls above 32 Deg. Some areas of the country may require a complete shelter depending upon your location.

Please note that the above quoted prices do not include any taxes, permits, fees, duties, etc.

I have enclosed a customer connection drawing and specifics on the unit quoted herein for your review.

Thank you for the opportunity of quoting our equipment and after review of the above, should you have any questions or require additional information, please feel free to contact me at your convenience.

Very truly yours,

INDECK POWER EQUIPMENT COMPANY

John P. Sullivan
Sales Engineer

JPS/mg
Enclosures

70,000 PPH Rental Boiler Specifications

General Information:
One (1) 70,000 PPH trailer mounted watertube steam boiler, designed to the ASME Code for 350 psig design pressure, arranged for natural gas or #2 oil firing, complete with manufacturer's standard boiler trim, Low NO_X burner, and combustion controls.

Boiler Information:	
Design Pressure	350 PSI
Maximum Operating Pressure	325 PSI
Minimum Operating Pressure	125 PSI
Gas Fired Requirements:	
Gas Consumption (100%)	88,435 SCFH
Gas Pressure Required at Connection	
Must be Regulated to	10-12 PSI
Electrical Amps on Gas Firing	110
Emissions Information	Upon Request
Low NO_X Burner	All Units
Oil Fired Requirements :(#2 Oil Only)	
Oil Consumption (100%)	606 GPH
Minimum Oil Pressure At Connection	Positive
Maximum Oil Pressure At Connection	30 PSI
Pilot Gas Pressure Required for Oil Start-up	2.0 PSI
Oil Atomization (Air)	
Minimum Air Pressure	80 PSI
Maximum Air Pressure	120 PSI
Air Consumption	35 SCFM
Min. Capacity Req'd for Steam Atomization	25%
Oil Atomization (Steam) - Steam Pressure Required	125 PSI
Electrical Amps on Oil Firing	125
Emissions Information	Upon Request with Supplied Fuel Analysis
Low NO_X Burner	All Units
Feedwater Requirements:	
Minimum Feedwater Pressure	60-75 PSI Above Operating Pressure
Maximum Feedwater Pressure	100 PSI Above Operating Pressure
Minimum Feedwater Temperature	240 Deg. F.
Electrical Requirements - Single Point Connection:	
Electrical Amps- Gas Fired	110
Electrical Amps- Oil Fired	125
F.D. Fan	75 HP
Oil Pump (#2 Oil Only)	2 HP
Voltage	480V/3-Phase
Motor Starter	Included
Transformer (480 to 120)	Included
Instrument Quality Compressed Air Required for Feedwater Control Valve:	
Minimum Air Pressure	50 PSI
Maximum Air Pressure	120 PSI

Auxiliary Equipment to be Field Mounted by Others:

(1) 6 ft. high stack and transition assembly.
(1) 8" - 300 psig flanged steam non-return valve.
(2) Bottom drum tandem blowdown valves.
(2) ASME safety relief valves set at 350 psi.
(1) Flanged upper forced draft fan housing.

Dimensional Information:	
Trailer Width	10' - 6"
Trailer Length	52 Ft.
Shipping Weight	89,750 lbs.
Operating Weight	107,350 lbs.
Stack Diameter	48"

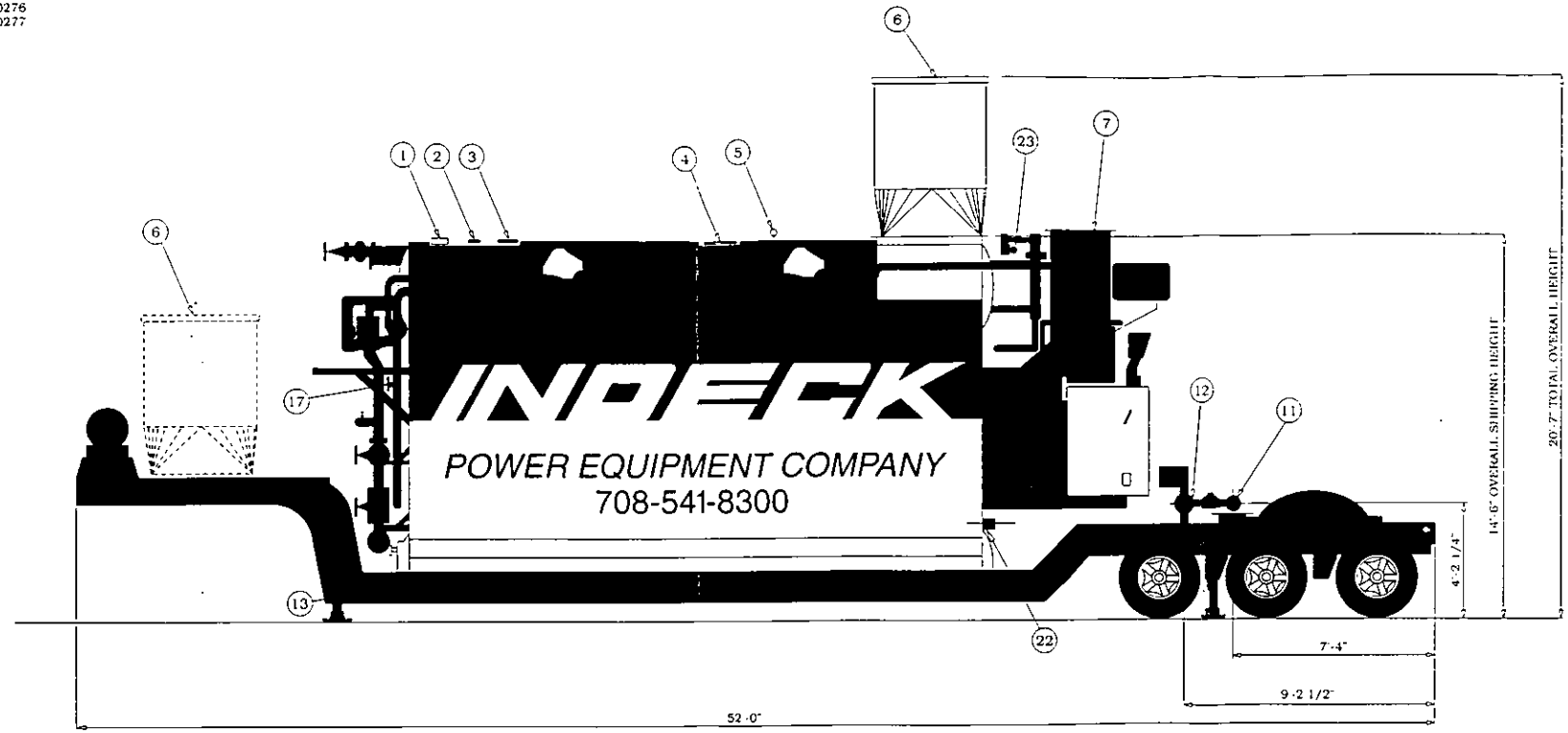
INDECK
INDECK POWER EQUIPMENT CO.
1111 S. Willis Avenue
Wheeling, Illinois 60090
(708) 541-8300
(800) 446-3325
FAX: (708) 541-9984

For further information, see customer connection drawing or contact Indeck at 1-708-541-8300.

UNIT REFERENCE:

87L 14-10272
88L 14-10273
89L 14-10274
90L 14-10275
91L 14-10276
92L 14-10277

70,000 PPH RENTAL BOILER



INSTALLATION SERVICE CONNECTIONS

1. 3"-300# SAFETY VALVE CONNECTION (SAFETY VALVE MUST BE REMOVED FOR TRANSPORT)
2. 3"-300# SAFETY VALVE CONNECTION (SAFETY VALVE MUST BE REMOVED FOR TRANSPORT)
3. 3"-300# SAFETY VALVE CONNECTION (SAFETY VALVE MUST BE REMOVED FOR TRANSPORT) (& FOR LOW PRESSURE OPERATION ONLY)
4. 8"-300 # MAIN STEAM OUTLET CONNECTION
5. 1" NPT DRUM VENT / AUX CONNECTION
6. FLUE GAS STACK AND TRANSITION (REMOVED FOR TRANSPORT)
7. UPPER F.D. FAN HOUSING (REMOVABLE TO PROVIDE ADDITIONAL SHIPPING CLEARANCE (FLANGED))
8. 1 1/2"-300# AUX ATOMIZING AIR / STEAM CONNECTION (LOCATED BEHIND CABINET)
9. 1/2" NPT PILOT GAS CONNECTIONS (NAT OR PROPANE) (LOCATED BEHIND CABINET)
10. 3/4" NPT FUEL OIL RETURN CONNECTION (LOCATED ON OPPOSITE SIDE OF TRAILER)
11. 1-1/2"-NPT FUEL OIL SUPPLY CONNECTION (LOCATED ON OPPOSITE SIDE OF TRAILER)
12. 4"-150 # FUEL GAS CONNECTION
13. 1-1/2"-300 # BLOW OFF CONNECTION
14. 1-1/2"-300 # LOWER DRUM HEATING COIL CONNECTIONS
15. 3/4" NPT CHEMICAL FEED CONNECTION
16. 1" CONTINUOUS BLOWDOWN CONNECTION (LOCATED ON OPPOSITE SIDE OF TRAILER)
17. 2-1/2"-300 # FEEDWATER SUPPLY CONNECTION
18. 460/60/3 POWER SUPPLY 150 AMPS
19. 3"-300# SOOT BLOWER STEAM SUPPLY CONNECTION
20. 2"-300# CHEMICAL CLEANING CONNECTION
21. 1" NPT FURNACE PRESS CONNECTION
22. WASHOUT
23. 1/4" NPT INSTRUMENT AIR CONNECTION

DESIGN DATA

OVERALL LENGTH:	52'-0"
OVERALL WIDTH	10'-6"
NET WEIGHT (INCL TRAILER)	89,750 LBS
CONTINUOUS CAPACITY:	70,000 PPH
DESIGN PRESSURE:	350 PSIG
FEEDWATER TEMPERATURE:	220 DEG F
FURNACE VOLUME:	854 CU. FT.
CONVECTION HEATING SURFACE:	3647 SQ. FT.
RADIANT HEATING SURFACE:	620 SQ. FT
TOTAL HEATING SURFACE:	4267 SQ. FT. (A.S.M.E.)
GAS SUPPLY PRESSURE	10 PSIG (REGULATED BY CUSTOMER)
OIL SUPPLY PRESSURE	30 PSIG FLOODED MAX.
FEED WATER PRESSURE	75-100 PSIG ABOVE OPERATING PRESSURE
INSTRUMENT AIR PRESSURE	50 PSIG MIN.

NOTE 1: A NATURAL GAS OR PROPANE PILOT IS REQUIRED FOR OIL
NOTE 2: PROVIDE ADEQUATE WEATHER PROTECTION FOR BURNER, CONTROLS AND PERSONNEL

C.F. NO. TRAILER\70-350

INDECK 70,000 PPH RENTAL BOILER