

Check Sheet

Company Name: Citrus Hill MFG
Permit Number: AC53-154792,-93
PSD Number:
County: Polk
Permit Engineer:
Others involved:

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Final Application (if applicable)
- Waiver of Department Action
- Department Response

Intent:

- Intent to Issue
- Notice to Public
- Technical Evaluation
- BACT Determination
- Unsigned Permit

Attachments:

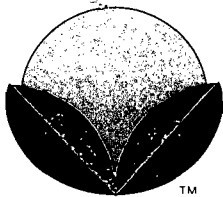
-
-
-
- Correspondence with:
 - EPA
 - Park Services
 - County
 - Other
- Proof of Publication
- Petitions - (Related to extensions, hearings, etc.)

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination

Post Permit Correspondence:

- Extensions
- Amendments/Modifications
- Response from EPA
- Response from County
- Response from Park Services
- Other



The Citrus Hill Manufacturing Company

P.O. BOX 2000, FROSTPROOF, FLORIDA 33843

May 11, 1990

RECEIVED

MAY 17 1990

DER-BAQM

Mr. C. H. Fancy, P.E.
Chief, Bureau of Air Quality Management
Department of Environmental Regulation
Twin Tower Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Operation Permit Amendments
A053-175729 Erie City Boiler No. 1
A053-175727 Keeler Boiler No.2
A053-175728 Citrus Peel Dryer

Dear Mr. Fancy:

In conversation with Mr. Raval of your office sometime ago, I mentioned our interest in being able to use waste oil generated at our facility as fuel for the above referenced sources. Normally, the quantity generated annually is approximately 3,000 gallons; however, our present inventory is approximately 4,000 in our storage tank.

The source of the waste oil comes from our service station as well as oil from compressors in our refrigeration systems.

Previous testings of the waste oil have indicated the oil of being non-hazardous in content. I am enclosing an analysis of the representative waste oil we wish to be burned in our boilers and citrus peel dryer when firing on No. 6 fuel oil with maximum sulfur content of 1%.

If you have any questions, please contact me at (813) 635-2211.

Sincerely,

Kenneth J. Ballard
Environmental Manager

KJB:RFS
0359R

Enclosure

cc: m. Dugg
B. Thomas, SW Dist

PEMBROKE LABORATORIES, INC.

Mailing Address: 528 Gooch Rd., Ft. Meade, FL. 33841

Citrus Hill Mfg. Co.
P O Box 2000
Frostproof, FL 33834

Date Received: 10-27-89

Date Reported: 11-15-89

Attn: Glenda Ellis

PO #CH10614

Lab Number

MC-9597

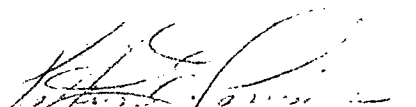
Sample I.D.

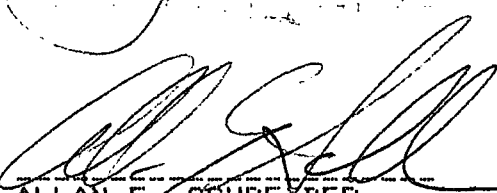
Waste Oil Sample

Arsenic	mg/Kg	0.3
Cadmium	mg/Kg	1.4
Chromium	mg/Kg	3.0
Lead	mg/Kg	3.1
Flash Point	oC	>60.
Total Halogens	ppm	<10.

Thank you for this opportunity to serve you!

Respectfully submitted,


KATHRYN E. GARRISON
Laboratory Supervisor


ALLAN E. SCHREYBER
Vice President

Laboratory I.D. 84172

P 274 010 412

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

* U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

Mr. W. K. Miller, Plant Mgr.	
The Citrus Hill Manu. Co.	
P.O. Box 2000	
Frostproof, FL 33843	
P.O., State and ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
mailed: 3/29/89	
Permits: AC 53-154792 & -154793	

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. W. K. Miller, Plant Mgr. The Citrus Hill Manu. Co. P.O. Box 2000 Frostproof, Florida 33843	4. Article Number P 274 010 412
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>Supp</i>	
7. Date of Delivery <i>3-31-89</i>	

PS Form 3811, Mar. 1988

* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

File copy



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martínez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. W. K. Miller
The Citrus Hill Manufacturing Co.
P. O. Box 2000
Frostproof, Florida 33843

March 28, 1989

Enclosed are construction permits Nos. AC 53-154792, and AC 53-154793 for the existing Erie City boiler and three VA power boilers at Citrus Hills' Bartow facility in Polk County. These permits are issued pursuant to Section 403, Florida Statutes.

Any party to these permits has the right to seek judicial review of the permits pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 of Appeal must be filed within 30 days from the date these permits are filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management

Copy furnished to:

J. McDonald, SW District
G. Nevin, P.E.

Pradeep, Ravel 3-28-89 AM

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 3-29-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Martha J. Wise 3-29-89
Clerk Date

Final Determination

Citrus Hill Manufacturing Company
Bartow, Polk County, Florida

3 VA Boiler
1 Erie City Boiler

Permit Numbers:

AC 53-154792
AC 53-154793

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

March 10, 1989

Final Determination

Citrus Hill's applications for permits for 3-VA boilers and one Erie City boiler at their existing facility in Bartow, Polk County, Florida, have been reviewed by the Bureau of Air Quality Management. Comments were received in response to the Public Notice published in The Lakeland Ledger on February 11, 1989.

Comments were received over the phone from Jim McDonald of DER's Southwest District office recommending clarification of specific conditions by addressing each boiler individually, and by mentioning the compliance test frequency.

The permit expiration date will be changed to allow adequate time for testing.

The final action of the Department will be to issue the permits as proposed with amended specific conditions 1, 2, 3 and 6 in permit AC 53-154793, and specific condition 6 in permit AC 53-154792, to reflect agreement with comments received, and a revised permit expiration date.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:

Citrus Hill Manufacturing Co.
Post Office Box 2000
Frostproof, FL 33843

Permit Number: AC 53-154792
Expiration Date: July 1, 1989
County: Polk
Latitude/Longitude: 27° 51' 23"
81° 53' 50"

Project: Erie City Boiler,
Bartow Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of a 29 MMBtu/hr heat input Erie City boiler producing up to 22,000 lbs/hr steam at 150 psig. The boiler shall fire only natural gas and is located at Citrus Hill's Bartow facility, Polk County, Florida.

The source shall be in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Citrus Hill's application package received September 15, 1988.
2. DER's incompleteness letter sent October 10, 1988.
3. Citrus Hill's response received November 17, 1988.
4. Citrus Hill's letter received January 9, 1989.
5. Preliminary Determination dated January 19, 1989.
6. Final Determination dated March 10, 1989.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute a waiver of 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.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The Erie City boiler shall operate for no more than 3168 hours annually (typically between October and May).
2. The maximum heat input shall not exceed 29 MMBtu/hr firing up to 29,000 cu. ft/hr of natural gas.
3. Only natural gas shall be fired in this boiler.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: July 1, 1989

4. Projected emissions from the Erie City boiler operating at the maximum allowable rate are tabulated below for inventory purposes.

Pollutant	Emissions	
	lbs/hr	TPY
PM	0.15	0.23
SO ₂	0.02	0.03
NO _x	4.06	6.4
CO	1.02	1.6
VOC	0.17	0.27

5. Visible emissions (VE) shall not exceed 20% opacity. It is expected that under proper operation the VE will not exceed 5% opacity.

6. Initial and annual compliance test for VE shall be conducted using EPA Method 9 in accordance with the 1987 version of 40 CFR 60 Appendix A. DER's Southwest District office shall be notified in writing a minimum of 15 days prior to testing. Written reports of the test shall be submitted to the district office within 45 days of test completion.

7. Good combustion practices shall be implemented at all times as control measures for products of combustion.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).

9. An application for an operation permit must be submitted to the DER's Southwest District office at least 60 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

10. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to DER's Southwest District office.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: July 1, 1989

Issued this 17 day
of March, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtman, Secretary



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:

Citrus Hill Manufacturing Co.
Office Box 2000
Frostproof, Fl 33843

Permit Number: AC 53-154793

Expiration Date: July 1, 1989

County: Polk

Latitude/Longitude: 27°51'23"
81°53'50"

Project: 3 VA-Power Boilers
Bartow Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of three 6.8 MMBtu/hr heat input VA-Power boilers producing up to 5,000 lbs/hr steam at 150 psig each. The boilers shall fire only natural gas and are located at Citrus Hill's Bartow facility, Polk County, Florida.

The source shall be in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Citrus Hill's application package received September 15, 1988.
2. DER's incompleteness letter sent October 10, 1988.
3. Citrus Hill's response received November 17, 1988.
4. Citrus Hill's letter received January 9, 1989.
5. Preliminary Determination dated January 19, 1989.
6. Final Determination dated March 10, 1989.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

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, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute a waiver of 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.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: July 1, 1989

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The three VA-Power boilers shall operate for no more than 3168 hours annually (typically between October and May) each.
2. The maximum heat input to each boiler shall not exceed 6.8 MMBtu/hr firing up to 6,800 cu. ft/hr of natural gas.
3. Only natural gas shall be fired in these boilers.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: July 1, 1989

4. Projected emissions from each VA-Power boiler operating at the maximum allowable rate are tabulated below for inventory purposes.

Pollutant	Emissions/Unit	
	lbs/hr	TPY
PM	0.03	0.05
SO ₂	0.01	0.01
NO _x	0.68	1.08
CO	0.14	0.22
VOC	0.05	0.08

5. Visible emissions (VE) shall not exceed 20% opacity. It is expected that under proper operation the VE will not exceed 5% opacity.

6. Initial and annual compliance test for VE shall be conducted using EPA Method 9 in accordance with the 1987 version of 40 CFR 60 Appendix A. DER's Southwest District office shall be notified in writing a minimum of 15 days prior to testing. Written reports of the test shall be submitted to the district office within 45 days of test completion.

7. Good combustion practices shall be implemented at all times as control measures for products of combustion.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).

9. An application for an operation permit must be submitted to the DER's Southwest District office at least 60 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

10. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to DER's Southwest District office.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: July 1, 1989

Issued this 17 day
of March, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

Best Available Control Technology (BACT) Determination
Citrus Hill Manufacturing Company
Polk County

The applicant proposes to permit their natural gas fired Erie City boiler and three VA boilers. The maximum heat inputs to these units will be 29 MMBTU/hr, and 6.8 MMBTU/hr for each VA boiler, respectively. The facility is located in Bartow, Polk County, Florida.

This BACT determination is required for the source as set forth in the Florida Administrative Code Rule 17-2.600(6) - Emission Limiting and Performance Standards.

BACT Determination Requested by the Applicant:

Particulate and sulfur dioxide emissions to be controlled by firing of natural gas.

Review of Group Members:

The determination was based upon comments received from the Stationary Source Control Section.

BACT Determination by DER:

The amount of particulate and sulfur dioxide emissions emitted from the boilers will be limited by the firing of natural gas.

BACT Determination Rationale:


Sulfur in fuel is a primary air pollution concern, in that most of the fuel sulfur becomes SO₂, and particulate emissions from fuel burning are related to the sulfur content. The firing of natural gas generates a minimal amount of particulates and SO₂ and is therefore deemed as BACT for the above referenced boilers.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blirstone Road
Tallahassee, Florida 32399-2400

Citrus Hill Manufacturing Company
Page Two

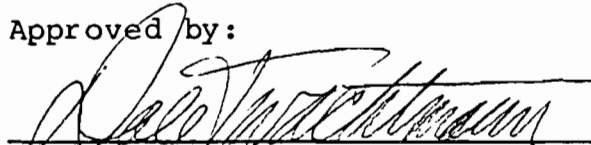
Recommended by:



C. H. Fancy, P.E.
Deputy Bureau Chief, BAQM

March 17, 1989
Date

Approved by:



Dale Twachtmann, Secretary

17 March 1989
Date



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Dale Twachtmann

fw FROM: Steve Smallwood *Smallwood*

SUBJ: Approval of Citrus Hill's Construction Permit Numbers:
AC 53-154792 and AC 53-154793

DATE: March 16, 1989

Attached for your approval and signature are permits prepared by Central Air Permitting for the above mentioned company for sources previously exempt from permitting.

Comments received during the public notice period have been addressed in the final determination.

Day 90, after which these permits will be issued by default, is March 25, 1989.

I recommend your approval and signature.

SS/PR/s

attachments

*Please call
Patty Adams
when signed*

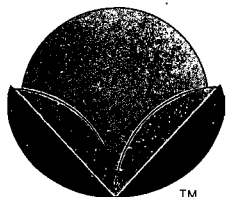
8-1344

RECEIVED
Shanks

MAR 17 1989

Office of the Secretary

file copy



The Citrus Hill Manufacturing Company

RECEIVED

FEB 17 1989

P.O. BOX 2000, FROSTPROOF, FLORIDA 33843

February 16, 1989

DER-BAQM

Mr. Pradeep Raval
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Twin Tower Office Building
Tallahassee, Florida 32301-8241

Re: Permit No. AC53-154792
AC53-154793

Dear Mr. Raval:

Pursuant to Section 403.815, F. S. and DER Rule 17-103.150, F. A. C., I have enclosed a clipping from the local circulation of the Lakeland Ledger newspaper.

This ad appeared in the legal section of the newspaper on February 11, 1989, as noted at the bottom of the ad.

I am sending this clipping as the Lakeland Ledger has been unable to produce an "Affadavit of Publication" within the allotted time of seven days. I trust this will be sufficient evidence that the ad appeared in the newspaper as stated above.

If I can be of further assistance or if there are questions, please call me at (813) 635-2211.

Sincerely,

K. J. Ballard
Environmental Manager

0606S
KJB/lsm

*copied: P. Raval
B. Thomas, SW Dist.*

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Citrus Hill Manufacturing Company Inc., Post Office Box 2000, Frostproof, Florida 33843, for their existing Erie City Boiler and three VA Power Boilers at Citrus Hill's Barlow facility, Polk County, Florida. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applications have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 285.207, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Dept. of Environmental Regulation
Southwest District Office
4520 Oak Fair Blvd.
Tampa, Florida 33610

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

P 274 007 560

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

★ U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

Sent to Mr. W. K. Miller, Citrus Hill	
Street and No. Mfg. Co.	
P.O. Box 2000	
P.O. State and ZIP Code Frostproof, FL 33843	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 1-23-89 Permit: AC 53-154792 AC 53-154793	

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. W. K. Miller Citrus Hill Manufacturing Co. P. O. Box 2000 Frostproof, FL 33843	4. Article Number P 274 007 560
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>Lapp</i>	
7. Date of Delivery <i>1-25-89</i>	



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachmann, Secretary

John Shearer, Assistant Secretary

January 19, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED


Mr. W. K. Miller
The Citrus Hill Manufacturing Co.
P. O. Box 2000
Frostproof, Florida 33843

Dear Mr. Miller:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permits for Citrus Hill's Erie City Boiler and three VA-Power Boilers located at Citrus Hill's existing Bartow fruit canning facility, Polk County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,


C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/ks

Attachments

cc: J. McDonald, SW District
G. Nevin, P.E.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

The Citrus Hill Manufacturing Co. DER File Nos. AC 53-154792
Post Office Box 2000 AC 53-154793
Frostproof, Florida 33843

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (copies attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Citrus Hill Manufacturing Company, applied on September 15, 1988, to the Department of Environmental Regulation for permits for their existing Erie City Boiler and three VA-Power Boilers at Citrus Hill's Bartow facility, Polk County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that air construction permits were required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

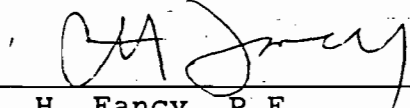
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the applicant have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

J. McDonald, SW District
G. Nevin, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on January 23, 1987.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Martha J. Wise January 23, 1987
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Citrus Hill Manufacturing Company Inc., Post Office Box 2000, Frostproof, Florida 33843, for their existing Erie City Boiler and three VA-Power Boilers at Citrus Hill's Bartow facility, Polk County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

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- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
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The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dept. of Environmental Regulation
Southwest District Office
4520 Oak Fair Blvd.
Tampa, Florida 33610

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Citrus Hill Manufacturing Company
Bartow, Polk County, Florida

3 VA Boilers
1 Erie City Boiler

Permit Numbers:

AC 53-154792
AC 53-154793

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

January 19, 1989

I. Application

A. Applicant

Citrus Hill Manufacturing Company
Post Office Box 2000
Frostproof, Florida 33843

B. Project & Location

The applicant proposes to obtain construction permits for existing boilers which were initially exempt from permitting requirements because the total heat input for the natural gas-fired boilers was less than 30 MMBtu/hr. One Erie City Boiler and 3 VA-Power Boilers totaling 50 MMBtu/hr heat input are fired on natural gas. The project emits nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide (CO) and volatile organic compounds (VOCs).

The UTM coordinates of Citrus Hill's Bartow facility are Zone 17, 411.6 km East and 3081.4 km North.

C. Facility Category

Citrus Hill's Bartow fruit canning facility is minor in accordance with Chapter 17-2 of the Florida Administrative Code (F.A.C.). The facility is classified in accordance with the Standard Industrial Classification (SIC) Code as Industry No. 2033, Canned Fruits, Vegetables, Jams, and Jellies. In accordance with the NEDS Source Classification Code (SCC) the sources are classified as follows:

- a) Erie City Boiler: 1-02-006-02, 10-100 MMBtu/hr
- b) 3 VA Power Boilers: 1-02-006-03, less than 10 MMBtu/hr each

Citrus Hill's application was received on September 15, 1988, and was deemed complete on November 17, 1988.

II. Project Description

A. Background

Citrus Hill had originally hoped to phase out the 29 MMBtu/hr Erie City Boiler (previously exempt from permitting requirements because of the 30 MMBtu/hr natural gas-fired boiler exemption) once the three 6.8 MMBtu/hr VA Power Boilers were operational. However, the VA boilers have not been able to meet the plant's steam demand on cold days. Since the applicant wishes to retain the older Erie City Boiler and also the 3 VA

Boilers, the total natural gas heat input rate approaches 50 MMBtu/hr. Although an exemption upto 50 MMBtu/hr has been proposed as part of rule amendments, it is uncertain when the rule will be amended. However, in accordance with current rules all four boilers will be permitted by way of federally enforceable construction permits.

B. Process

Citrus Hill's Bartow facility is primarily engaged in fruit canning. About 4000 boxes/day (combined grapefruits and oranges) are processed per day. About 28 lbs finished product per box of raw fruit is obtained.

Fruit is delivered into storage bins which have a capacity of about 500 boxes of fruit each. The fruit is manually graded to remove undesirable fruit before being aged for about three days to facilitate peeling. The fruit is then processed, sectionized and canned with a preservative. Once palleted, the canned fruit is transported to refrigerated storage.

Steam from the four boilers is used in a steam bath which is used in the fruit canning process. The Erie City boiler provides about 22,000 lbs/hr steam at 150 psig, while each of the three VA boilers provides about 5,000 lbs/hr steam at 150 psig.

III. Rule Applicability

The four boiler project will emit the pollutants PM, SO₂, NO_x, CO, and VOCs and is subject to a review in accordance with Chapters 17-2 and 17-4 of the Florida Administrative Code (F.A.C.) and Chapter 403 of the Florida Statutes.

Citrus Hill's Bartow facility is located in an area designated as attainment for all the criteria pollutants in accordance with F.A.C. Rule 17-2.420. The facility is more than 100 km (kilometers) from the Chassahowitzka National Wilderness Area, a Class I Area in accordance with F.A.C. Rule 17-2.440.

The project is not subject to Prevention of Significant Deterioration (PSD) Review Requirements since it is a minor facility, in accordance with F.A.C. Rule 17-2.500(2)(d).

The project is subject to Specific Source Emission Limiting Standards in accordance with F.A.C. Rule 17-2.600(6), Fossil Fuel Steam Generators with less than 250 MMBtu/hr heat input. Both the PM and SO₂ emission limitations will be determined pursuant to F.A.C. Rule 17-2.630, Best Available Control Technology (BACT).

The project is subject to compliance testing and reporting requirements in accordance with F.A.C. Rule 17-2.700. Compliance testing will be conducted using EPA Method 9 for determining visible emissions (VE) in accordance with the 1987 version of 40 CFR 60 Appendix A.

IV. Source Impact Analysis

A. Emission Limitation

The following will be the maximum allowable emissions from this project:

Pollutant	Erie City Boiler		VA-Power Boiler		Facility
	lbs/hr	TPY	lbs/hr	TPY	Total TPY
PM	0.15	0.23	0.03	0.05	0.38
SO ₂	0.02	0.03	0.01	0.01	0.06
NO _x	4.06	6.4	0.68	1.08	9.64
CO	1.02	1.6	0.14	0.22	2.26
VOC	0.17	0.27	0.05	0.08	0.51

Visible emissions shall not exceed 20% opacity.

The facility total includes emissions from the Erie City Boiler and the 3 VA Power Boiler. The BACT determination is attached.

B. Air Quality Analysis

The Technical evaluation of this project determined that ambient air modeling or monitoring would not be required to provide reasonable assurance that Florida's air quality standards would not be violated.

V. Conclusion

Based on the information provided by the applicant, the Department has reasonable assurance that the four boilers at Citrus Hill's Bartow facility, as described in the application and subject to the conditions of approval proposed herein will not cause or contribute to a violation of any ambient air quality standard or PSD increment, or violate any other technical provision of Chapter 17-2 of the Florida Administrative Code.



Best Available Control Technology (BACT) Determination
Citrus Hill Manufacturing Company
Polk County

The applicant proposes to permit their natural gas fired Erie City boiler and three VA boilers. The maximum heat inputs to these units will be 29 MMBTU/hr, and 6.8 MMBTU/hr for each VA boiler, respectively. The facility is located in Bartow, Polk County, Florida.

This BACT determination is required for the source as set forth in the Florida Administrative Code Rule 17-2.600(6) - Emission Limiting and Performance Standards.

BACT Determination Requested by the Applicant:

Particulate and sulfur dioxide emissions to be controlled by firing of natural gas.

Review of Group Members:

The determination was based upon comments received from the Stationary Source Control Section.

BACT Determination by DER:

The amount of particulate and sulfur dioxide emissions emitted from the boilers will be limited by the firing of natural gas.

BACT Determination Rationale:

Sulfur in fuel is a primary air pollution concern, in that most of the fuel sulfur becomes SO₂, and particulate emissions from fuel burning are related to the sulfur content. The firing of natural gas generates a minimal amount of particulates and SO₂ and is therefore deemed as BACT for the above referenced boilers.

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator
Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Citrus Hill Manufacturing Company
Page Two

Recommended by:

C. H. Fancy, P.E.
Deputy Bureau Chief, BAQM

_____ 1989
Date

Approved by:

Dale Twachtmann, Secretary

_____ 1989
Date



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Citrus Hill Manufacturing Co.
Post Office Box 2000
Frostproof, FL 33843

Permit Number: AC 53-154792
Expiration Date: June 1, 1989
County: Polk
Latitude/Longitude: 27° 51' 23"
81° 53' 50"

Project: Erie City Boiler,
Bartow Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of a 29 MMBtu/hr heat input Erie City boiler producing up to 22,000 lbs/hr steam at 150 psig. The boiler shall fire only natural gas and is located at Citrus Hill's Bartow facility, Polk County, Florida.

The source shall be in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Citrus Hill's application package received September 15, 1988.
2. DER's incompleteness letter sent October 10, 1988.
3. Citrus Hill's response received November 17, 1988.
4. Citrus Hill's letter received January 9, 1989.
5. Preliminary Determination dated January 19, 1989.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
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, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute a waiver of 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.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The Erie City boiler shall operate for no more than 3168 hours annually (typically between October and May).
2. The maximum heat input shall not exceed 29 MMBtu/hr firing up to 29,000 cu. ft/hr of natural gas.
3. Only natural gas shall be fired in this boiler.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: June 1, 1989

4. Projected emissions from the Erie City boiler operating at the maximum allowable rate are tabulated below for inventory purposes.

Pollutant	Emissions	
	lbs/hr	TPY
PM	0.15	0.23
SO ₂	0.02	0.03
NOx	4.06	6.4
CO	1.02	1.6
VOC	0.17	0.27

5. Visible emissions (VE) shall not exceed 20% opacity. It is expected that under proper operation the VE will not exceed 5% opacity.

6. Compliance with the VE limit shall be determined using EPA Method 9 in accordance with the 1987 version of 40 CFR 60 Appendix A. DER's Southwest District office shall be notified in writing a minimum of 15 days prior to testing. Written reports of the test shall be submitted to the district office within 45 days of test completion.

7. Good combustion practices shall be implemented at all times as control measures for products of combustion.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).

9. An application for an operation permit must be submitted to the DER's Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

10. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to DER's Southwest District office.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154792
Expiration Date: June 1, 1989

Issued this _____ day
of _____, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:

Citrus Hill Manufacturing Co.
Office Box 2000
Frostproof, Fl 33843

Permit Number: AC 53-154793

Expiration Date: June 1, 1989

County: Polk

Latitude/Longitude: 27°51'23"
81°53'50"

Project: 3 VA-Power Boilers
Bartow Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of three 6.8 MMBtu/hr heat input VA-Power boilers producing up to 5,000 lbs/hr steam at 150 psig each. The boilers shall fire only natural gas and are located at Citrus Hill's Bartow facility, Polk County, Florida.

The source shall be in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Citrus Hill's application package received September 15, 1988.
2. DER's incompleteness letter sent October 10, 1988.
3. Citrus Hill's response received November 17, 1988.
4. Citrus Hill's letter received January 9, 1989.
5. Preliminary Determination dated January 19, 1989.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
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, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute a waiver of 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.
4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement 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.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefor caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

6. The permittee shall at all times 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.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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.

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 notify and provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including exact 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.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

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 revocation of this permit.

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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- Determination of Best Available Control Technology (BACT)
- Determination of Prevention of Significant Deterioration (PSD)
- Compliance with New Source Performance Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: June 1, 1989

GENERAL CONDITIONS:

b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The three VA-Power boilers shall operate for no more than 3168 hours annually (typically between October and May).

2. The maximum heat input shall not exceed 6.8 MMBtu/hr firing up to 6,800 cu. ft/hr of natural gas.

3. Only natural gas shall be fired in this boiler.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: June 1, 1989

4. Projected emissions from each VA-Power boiler operating at the maximum allowable rate are tabulated below for inventory purposes.

<u>Pollutant</u>	<u>Emissions/Unit</u>	
	<u>lbs/hr</u>	<u>TPY</u>
PM	0.03	0.05
SO ₂	0.01	0.01
NO _x	0.68	1.08
CO	0.14	0.22
VOC	0.05	0.08

5. Visible emissions (VE) shall not exceed 20% opacity. It is expected that under proper operation the VE will not exceed 5% opacity.

6. Compliance with the VE limit shall be determined using EPA Method 9 in accordance with the 1987 version of 40 CFR 60 Appendix A. DER's Southwest District office shall be notified in writing a minimum of 15 days prior to testing. Written reports of the test shall be submitted to the district office within 45 days of test completion.

7. Good combustion practices shall be implemented at all times as control measures for products of combustion.

8. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the BAQM prior to 60 days before the expiration of the permit (F.A.C. 17-4.090).

9. An application for an operation permit must be submitted to the DER's Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. 17-4.220).

10. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to DER's Southwest District office.

PERMITTEE:
Citrus Hill Manufacturing Co.

Permit No. AC 53-154793
Expiration Date: June 1, 1989

Issued this _____ day
of _____, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtman, Secretary

ATTACHMENTS AVAILABLE UPON REQUEST

file



The Citrus Hill Manufacturing Company

P.O. BOX 2000, FROSTPROOF, FLORIDA 33843

RECEIVED

January 5, 1989

JAN 09 1989

DER-BAQM

Mr. Pradeep Roval
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Twin Tower Office Building
Tallahassee, Florida 32301-8241

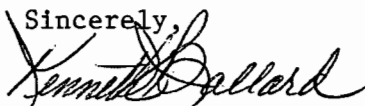
RE Construction Permit Applications
AC 53-154792
53-154793

Dear Mr. Roval:

In reply to your request on steam capacities for the above referenced construction permit applications. I am enclosing a fact sheet drawn up by C.S. Herrick, Project Engineer on the boiler in question.

Also, included are the revised emission factors for VA-powered boilers with less than 10×10^6 Btu/hr heat input for nitrogen oxides, carbon monoxide and volatile organics.

If I can be of further assistance or if there are other questions, please call me at (813) 635-2211.

Sincerely,

Kenneth J. Ballard
Environmental Manager

KJB:JSC
1157c copied: 1-9-89

Pradeep
CHF/BT
J. McDonald, Tampa

(3) VA-POWERED BOILERS - Natural Gas

Emission Calculations

Basis Fuel Consumption: 6.8×10^6 BTU/hr.

Hours of Operation: 3168 hr./yr.

Particulate

$$\frac{5 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .034 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 108 \frac{\text{lb}}{\text{yr}}$$
$$\frac{108}{2000} = .054 \frac{\text{ton}}{\text{yr}}$$

(SO₂)

Sulphur Dioxide

$$\frac{.6 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .004 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 12.7 \frac{\text{lb}}{\text{yr}}$$
$$\frac{12.7}{2000} = .006 \frac{\text{ton}}{\text{yr}}$$

(NO_x)

Nitrogen Oxide

$$\frac{100 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .68 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 2154 \frac{\text{lb}}{\text{yr}}$$
$$\frac{2154}{2000} = 1.08 \frac{\text{ton}}{\text{yr}}$$

(CO₂)

Carbon Monoxide

$$\frac{20 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .136 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 431 \frac{\text{lb}}{\text{yr}}$$
$$\frac{431}{2000} = .22 \frac{\text{ton}}{\text{yr}}$$

(VOC)

Volatile Organics

$$\frac{8.0 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .054 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 171 \frac{\text{lb}}{\text{yr}}$$
$$\frac{171}{2000} = .08 \frac{\text{ton}}{\text{yr}}$$

(Emission Factors from AP-42, Table 1.4-1) Boilers (<10) 10^6 Btu/hr

(3) VA-POWERED BOILERS - Natural Gas

Emission Calculations

Basis Fuel Consumption: 6.8×10^6 BTU/hr.

Hours of Operation: 3168 hr./yr.

Particulate

$$\frac{5 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .034 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 108 \frac{\text{lb}}{\text{yr}}$$
$$\frac{108}{2000} = .054 \frac{\text{ton}}{\text{yr}}$$

(SO₂)

Sulphur Dioxide

$$\frac{.6 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .004 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 12.7 \frac{\text{lb}}{\text{yr}}$$
$$\frac{12.7}{2000} = .006 \frac{\text{ton}}{\text{yr}}$$

(NO_x)

Nitrogen Oxide

$$\frac{100 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .68 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 2154 \frac{\text{lb}}{\text{yr}}$$
$$\frac{2154}{2000} = 1.08 \frac{\text{ton}}{\text{yr}}$$

(CO₂)

Carbon Monoxide

$$\frac{20 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .136 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 431 \frac{\text{lb}}{\text{yr}}$$
$$\frac{431}{2000} = .22 \frac{\text{ton}}{\text{yr}}$$

(VOC)

Volatile Organics

$$\frac{8.0 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .054 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 171 \frac{\text{lb}}{\text{yr}}$$
$$\frac{171}{2000} = .08 \frac{\text{ton}}{\text{yr}}$$

(Emission Factors from AP-42, Table 1.4-1) Boilers (<10) 10⁶ Btu/hr

(3) VA-POWERED BOILERS - Natural Gas

Emission Calculations

Basis Fuel Consumption: 6.8×10^6 BTU/hr.

Hours of Operation: 3168 hr./yr.

Particulate

$$\frac{5 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .034 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 108 \frac{\text{lb}}{\text{yr}}$$
$$\frac{108}{2000} = .054 \frac{\text{ton}}{\text{yr}}$$

(SO₂)

Sulphur Dioxide

$$\frac{.6 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .004 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 12.7 \frac{\text{lb}}{\text{yr}}$$
$$\frac{12.7}{2000} = .006 \frac{\text{ton}}{\text{yr}}$$

(NO_x)

Nitrogen Oxide

$$\frac{100 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .68 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 2154 \frac{\text{lb}}{\text{yr}}$$
$$\frac{2154}{2000} = 1.08 \frac{\text{ton}}{\text{yr}}$$

(CO₂)

Carbon Monoxide

$$\frac{20 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .136 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 431 \frac{\text{lb}}{\text{yr}}$$
$$\frac{431}{2000} = .22 \frac{\text{ton}}{\text{yr}}$$

(VOC)

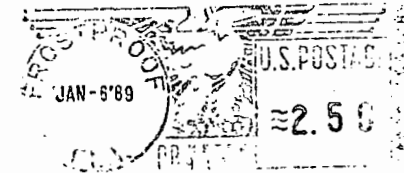
Volatile Organics

$$\frac{8.0 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .054 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 171 \frac{\text{lb}}{\text{yr}}$$
$$\frac{171}{2000} = .08 \frac{\text{ton}}{\text{yr}}$$

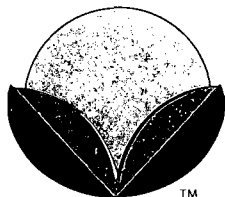
(Emission Factors from AP-42, Table 1.4-1) Boilers (<10)⁶ Btu/hr

The Citrus Hill Manufacturing Company

P.O. BOX 2000
FROSTPROOF, FLORIDA 33843



Mr. Pradeep Roval
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Twin Tower Office Building
Tallahassee, Florida 32301-8241



Certified P 264 527 002

11-15-84

Frostproof, FL

The Citrus Hill Manufacturing Company

file copy

P.O. BOX 2000, FROSTPROOF, FLORIDA 33843

RECEIVED

November 11, 1988

NOV 17 1988

DER-BAQM

Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
Twin Tower Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Construction Permit Applications
AC 53-154792
AC 53-154793

Dear Mr. Fancy:

In reply to your letter dated October 10, 1988, in which you requested additional information on referenced construction permit applications in order to continue with the reviewing process of the applications, please find enclosed the following information.

1. Signed copies of page 1 of all (4) applications.
2. The Erie City boiler being of 1943 vintage and being unable to locate the equipment ID number make it next to impossible to obtain documentation of input or output valves to support design capabilities of the unit.

However, C. S. Herrick, Project Engineer, observed the boiler being fired under maximum fuel input in order to obtain fuel usage data while also determining rated output. These were the values that were submitted in the initial applications.
3. A process description, and sketch, is furnished in the attachment.
4. There are no other sources of air pollution or associated air emissions at the Bartow facility requiring permits.
5. From a historical viewpoint, the hours of operation data is felt to be of adequate duration for citrus canning seasons. The fuel/heat input quantities should also remain unchanged.

The Citrus Hill Manufacturing Company

P.O. BOX 2000
FROSTPROOF, FLORIDA 33843

*Fold at line over top of envelope to the right
of the return address*

CERTIFIED

P 264 527 022

MAIL

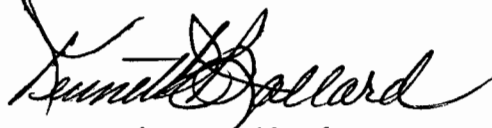


Mr. C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation
Twin Tower Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400



If I can be of further assistance or if there are other questions, please call me at (813) 635-2211.

Sincerely,



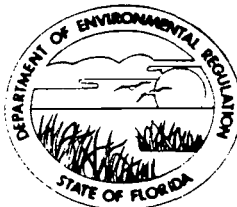
Kenneth J. Ballard
Environmental Manager

KJB:RFS
0312R

cc: Mr. Jim McDonald, Engineer
Air Quality Section
Southwest District
4520 Oak Fair Blvd.
Tampa, FL 33610-7347

*copied: Pradeep Raval
CHF/BT*

DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

WILLIAM K. HENNESSEY
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Boiler [] New¹ [X] Existing¹

APPLICATION TYPE: [X] Construction [] Operation [] Modification

COMPANY NAME: The Citrus Hill Manufacturing Company COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) #1 Va-power boiler

SOURCE LOCATION: Street State Road 60 West City Bartow

UTM: East _____ North _____

Latitude 27 ° 51 ' 23 "N Longitude 81 ° 53 ' 50 "W

APPLICANT NAME AND TITLE: W. K. Miller, Plant Manager

APPLICANT ADDRESS: P. O. Box 2000, Frostproof, FL 33843

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Citrus Hill Mfg. Co.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permit establishment.

*Attach letter of authorization

Signed: _____

W. K. Miller, Plant Manager
Name and Title (Please Type)

Date: 11-14-88 Telephone No. 813-635-2211

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION



SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKE
SECRETARY

WILLIAM K. HENNESSE
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Boiler New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: The Citrus Hill Manufacturing Company COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) #2 Va-power boiler

SOURCE LOCATION: Street State Road 60 West City Bartow

UTM: East _____ North _____

Latitude 27° 51' 23"N Longitude 81° 53' 50"W

APPLICANT NAME AND TITLE: W. K. Miller, Plant Manager

APPLICANT ADDRESS: P. O. Box 2000, Frostproof, FL. 33843

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Citrus Hill Mfg. Co

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permit establishment.

*Attach letter of authorization

Signed: *W. K. Miller*

W. K. Miller, Plant Manager

Name and Title (Please Type)

Date: 11-14-88 Telephone No. 813-635-2211

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

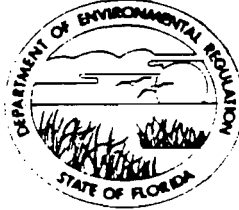
This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in permit application. There is reasonable assurance, in my professional judgment,

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610



BOB GRAHA
GOVERNOR

VICTORIA J. TSCHINKA
SECRETARY

WILLIAM K. HENNESSY
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Boiler [] New¹ [X] Existing¹

APPLICATION TYPE: [X] Construction [] Operation [] Modification

COMPANY NAME: The Citrus Hill Manufacturing Company COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) #3 Va-power Boiler

SOURCE LOCATION: Street State Road 60 West City Bartow

UTM: East _____ North _____

Latitude 27° 51' 23"N Longitude 81° 53' 50"W

APPLICANT NAME AND TITLE: W. K. Miller, Plant Manager

APPLICANT ADDRESS: P. O. Box 2000, Frostproof, FL 33843

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Citrus Hill Mfg. Co

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permit establishment.

*Attach letter of authorization

Signed: [Signature]

W. K. Miller, Plant Manager
Name and Title (Please Type)

Date: 11-14-88 Telephone No. 813-635-2211

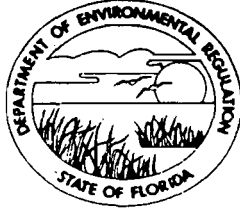
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¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION



BOB GRAHAM
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VICTORIA J. TSCHINKEL
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SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Boiler [] New¹ [x] Existing¹

APPLICATION TYPE: [x] Construction [] Operation [] Modification

COMPANY NAME: The Citrus Hill Manufacturing Co. COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Erie City Boiler

SOURCE LOCATION: Street State Road 60 West City Bartow

UTM: East _____ North _____

Latitude 27 ° 51 ' 23 "N Longitude 81 ° 53 ' 50 "W

APPLICANT NAME AND TITLE: W. K. Miller, Plant Manager

APPLICANT ADDRESS: P. O. Box 2000, Frostproof, FL 33843

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*Attach letter of authorization

Signed:

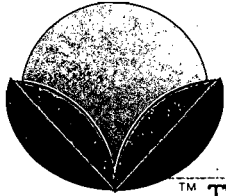
W. K. Miller, Plant Manager
Name and Title (Please Type)

Date: 11-17-88 Telephone No. 813-635-2211

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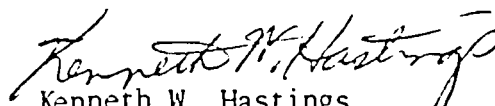
¹ See Florida Administrative Code Rule 17-2.100(57) and (104)



The Citrus Hill Manufacturing Company

™ THE PROCESSING OF FRUIT FOR CHILLED CITRUS SECTIONS PO BOX 2000, FROSTPROOF, FLORIDA 33843

1. Fruit is delivered into the plant and unloaded into storage bins with a capacity of approximately five hundred (500) boxes of fruit. This would equate to 45,000 pounds of oranges or 42,500 pounds of grapefruit. It is manually graded during unloading to remove unwholesome fruit and extraneous material.
2. The fruit is stored in the bins for a period of up to three (3) days to facilitate the loosening of the peel.
3. After the period of time mentioned above, the fruit is conveyed through a steam bath at 180°F to 200°F (82-94°C) for an approximate residence time of five (5) to eight (8) minutes. It is then conveyed on sanitary belts to Food Machinery Corporation peeling machines. These are individually attended to align the fruit for a five (5) stage peeling operation.
4. The peeled fruit is discharged onto a sanitary belt where it is inspected for complete removal of the peel.
5. The fruit is automatically delivered to sanitary, holed, plastic trays and conveyed through an enclosed spray bath (partially submerged) of recirculating 1.5 to 3.0 percent sodium hydroxide solution at a temperature of 170°F one (1) minute to facilitate the removal of the last vestiges of string and albedo. After a potable water rinse, the fruit is inspected for removal of any adhering string or albedo still in evidence.
6. The fruit is conveyed through a counter-current water bath with overhead sprays regulated at 40°F (4°C). This is followed by a potable water rinse as the trays exit the chill bath.
7. The trays of fruit are conveyed to the sectionizing area where personnel manually separate the individual segments and place them in glass jars which already contain the liquid medium. The prescribed amount of preservative has already been dissolved in the liquid medium so that a level of 0.05 to 0.10 percent, by weight, will be attained in the final product.
8. After the jars are filled, they are steam exhausted and sealed by machine.
9. Immediately the jars are conveyed through a chilled water bath maintained at 34°F to 45°F (1° to 7°C) to lower the temperature of the product to 45°F (7°C) maximum.
10. Upon departure from the chilled water bath, a paper label is applied to the jars which are then cased and stacked on pallets.
11. Each full pallet is immediately transported to refrigerated storage that is maintained at 30°F to 38°F (-1° to 3°C) until an order for shipment is received. It is shipped by refrigerated trucks.
12. As is evident from the preceding flow description, the product is not pasteurized; hence, the requirement for an antimicrobial preservative that is "generally recognized as safe" by the U.S. Food and Drug Administration (21 CFR) and the Food Chemicals Codex.


Kenneth W. Hastings
Quality Assurance Manager

LAGOON

MAINLINE SCLRR

PEEL BIN

Pasteurizer 190-200°F

Steam Bath 180-200°F

Sodium Hydroxide Bath 170°F

SECTIONS PROCESSING BLDG. 3.

BINS Fruit

Steam Cleanup

90 Room

WAREHOUSE BLDG. 2

COUNTY ROAD



DIESEL OIL TANK ELEVATED TANK

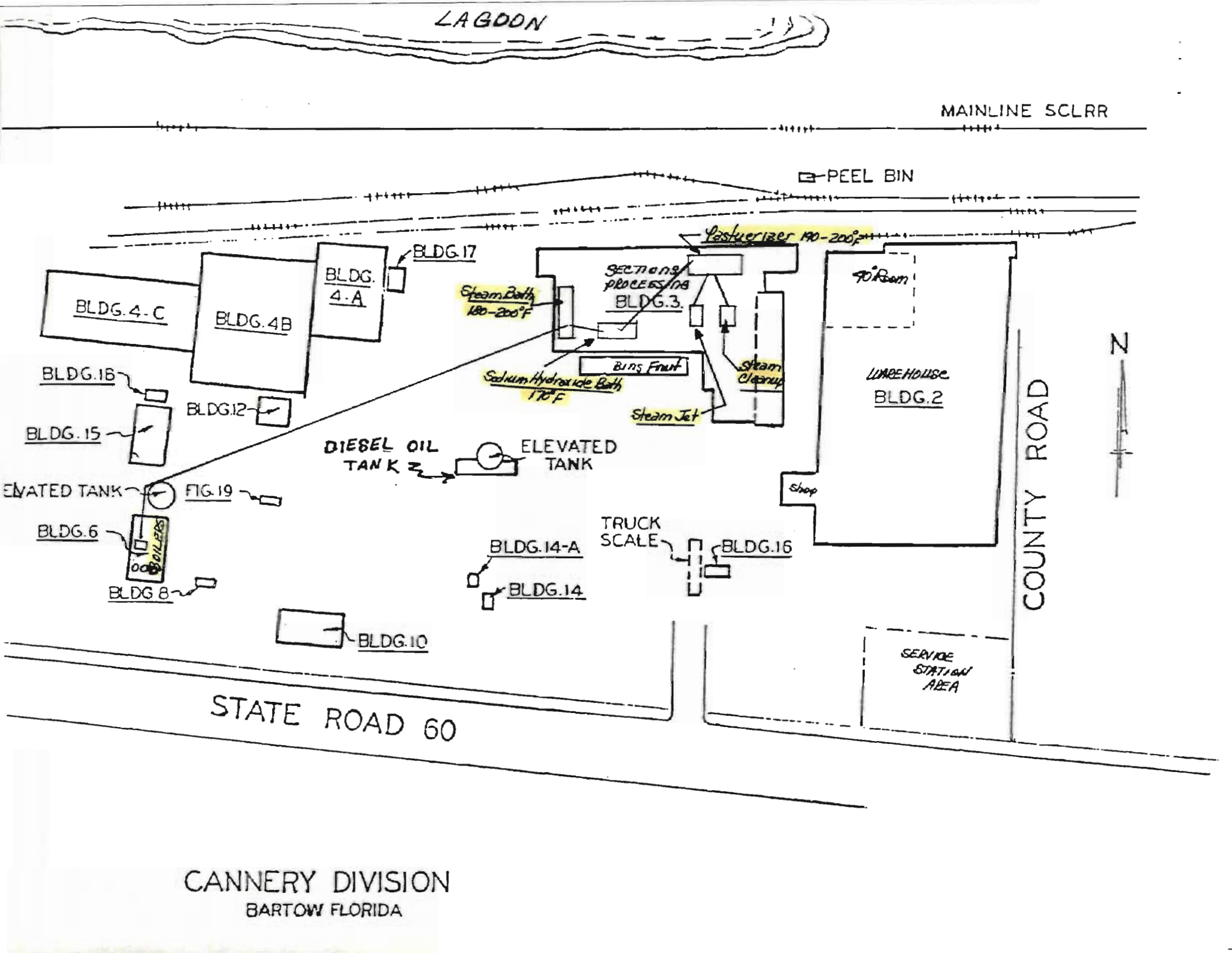
TRUCK SCALE

Shop

SERVICE STATION AREA

STATE ROAD 60

CANNERY DIVISION
BARTOW FLORIDA

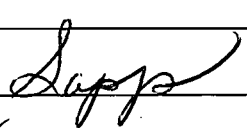


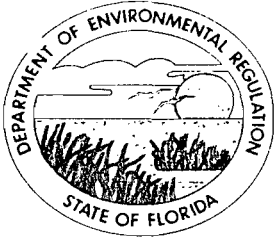
P 274 007 470

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

* U.S.G.P.O. 1985-480-794 PS Form 3800, June 1985	Sent to Mr. Kenneth Ballard, Citrus Hill	
	Street and No. P.O. Box 2000	
	P.O., State and ZIP Code Frostproof, Florida 33843	
	Postage	\$
	Certified Fee	
	Special Delivery Fee	
	Restricted Delivery Fee	
	Return Receipt showing to whom and Date Delivered	
	Return Receipt showing to whom, Date, and Address of Delivery	
	TOTAL Postage and Fees	\$
	Postmark or Date Mailed: 10-11-88 Permit: AC 53-154793 AC 53-154792	

<p>SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. <u>The return receipt fee will provide you the name of the person delivered to and the date of delivery.</u> For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.</p> <p>1. <input checked="" type="checkbox"/> Show to whom delivered, date, and addressee's address. 2. <input type="checkbox"/> Restricted Delivery ↑(Extra charge)↑ ↑(Extra charge)↑</p>	
3. Article Addressed to: Mr. Kenneth Ballard Citrus Hill Manufacturing Co. P. O. Box 2000 Frostproof, FL 33843	4. Article Number P 274 907 470 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
5. Signature - Addressee X	Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> . 8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X 	
7. Date of Delivery 10-13-88	



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

October 10, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kenneth Ballard
Citrus Hill Manufacturing Co.
Post Office Box 2000
Frostproof, Florida 33843

Dear Mr. Ballard:

Re: Review of Construction Permit Applications for Bartow's
3 Va-Power Boilers, Permit No. AC 53-154793; and Erie
City Boiler, Permit No. AC 53-154792

The Department has received and reviewed your above referenced application package dated September 8, 1988, and has deemed it incomplete. The following information will be required to continue the completeness review:

1. Please send a copy of page 1 of all four applications signed by the applicant.
2. Submit, if available, documentation from the manufacturers on the Erie City Boiler to establish it's design capabilities (Model No., fuel(s) input, heat input, steam output, emission characteristics, add on control options, etc.).
3. Please provide a brief overall process description including the function of the boilers to be permitted. Also, provide a sketch to show equipment layout, material quantities, flow pattern, and boiler locations/steam supply.
4. List other sources of air pollution and their air emissions at the Bartow facility which are not currently permitted.
5. Please confirm the hours of operation, the fuel/heat input quantities and the fuel options you require because these will be restricted in the permit(s).

Mr. Kenneth Ballard
Page Two
October 10, 1988

If you have any questions, please call Pradeep Raval at
(904)488-1344 or write to me at the above address.

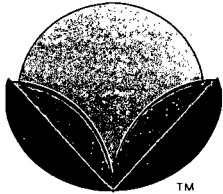
Sincerely,



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/PR/s

cc: J. McDonald, SW District
G. Nevin, P.E.



The Citrus Hill Manufacturing Company

RECEIVED
DER - MAIL ROOM
1988 SEP 15 AM 11:59

P.O. BOX 2000, FROSTPROOF, FLORIDA 33843

September 8, 1988

RECEIVED

SEP 15 1988

DER - BAQM

Mr. Bill Thomas
Department of Environmental
Regulations
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Thomas:

Enclosed please find four (4) applications for construction permits for our Erie City boiler and our three VA-Power modulatic boilers. Also enclosed is a full consumption data sheet and a check in the amount of \$400 to cover the application fees.

Our original intention was to phase out the Erie City boiler once the VA-Power modulatic boilers were operational on a sustained basis. Unfortunately, we have found that the modulatic boilers can not handle the plant steam demand under some plant operating conditions, particularly on colder days. Therefore, we must continue to rely on the Erie City boiler as a backup unit. We still intend to operate the modulatic boilers when they can handle the plant steam demand because they are more efficient than the Erie City unit. We will switch over to the larger Erie City boiler only when necessary to maintain production.

Thanks for your consideration in this matter. If you have any questions, please contact our Environmental Manager, Ken Ballard, at (813)635-2211.

Sincerely,

W. K. Miller
Plant Manager

WKM:RFS

Enclosures - 4 applications
consumption data sheet
\$400 check

cc: Mr. W. C. Thomas
District Air Engineer
Department of Environmental Regulation
4520 Oak Fair Blvd.
Tampa, FL 33610-7347

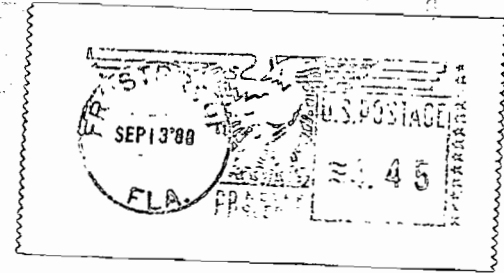
1031

Patty
delete permit #s
on #2 & #3 Va-Pwr
Boilers.

CERTIFIED

P 264 527 019

MAIL



FROM:

The Citrus Hill Manufacturing Company

POST OFFICE BOX 2000
FROSTPROOF, FLORIDA 33843

Mr. Bill Thomas

Department of Environmental
Regulations

Bureau of Air Quality Management

2600 Blair Stone Road

Tallahassee, FL 32399-2400

The Citrus Hill Manufacturing Company

P.O. BOX 2000
FROSTPROOF, FLORIDA 33843

0055

63-944
631

CHECK NO.
041597

NCNB NATIONAL BANK OF FLORIDA
AVON PARK, FLORIDA 33825

DATE

09-12-88

EXACTLY

NET AMOUNT

*****400 DOLLARS ***** CENTS *****400.00

PAY
TO THE
ORDER
OF

DEPT OF ENVIRONMENTAL REGULATIONS
4520 OAK FAIR BLVD
TAMPA, FL
33610-7347

W. K. Miller
AUTHORIZED SIGNATURE

W. K. Miller
AUTHORIZED SIGNATURE

FORM 8949

CHECK NUMBER **041597**

ATTACHED IS OUR CHECK COVERING FULL PAYMENT OF ITEMS DESCRIBED BELOW. IF THIS DOES NOT AGREE WITH YOUR RECORDS, RETURN ALL PAPERS WITH FULL EXPLANATION.

VOUCHER NO.	INVOICE NUMBER/DESCRIPTION	INVOICE AMOUNT	DEDUCTIONS	TOTAL
1005965	02720 TOTAL GROSS TOTAL NET AMOUNT	400.00 400.00		400.00

DETACH BEFORE CASHING

THE CITRUS HILL MANUFACTURING COMPANY
P.O. BOX 2000 FROSTPROOF, FL 33843

Sincerely,

W. K. Miller

W. K. Miller
Plant Manager

WKM:RFS

Enclosures - 4 applications
consumption data sheet
\$400 check

1031

cc: Mr. W. C. Thomas
District Air Engineer
Department of Environmental Regulation
4520 Oak Fair Blvd.
Tampa, FL 33610-7347

#100pd

AC 53-154792

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610



RECEIVED

SEP 15 1988

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
WILLIAM K. HENNESSEY
DISTRICT MANAGER

DER-BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Boiler [] New¹ [x] Existing¹
APPLICATION TYPE: [x] Construction [] Operation [] Modification
COMPANY NAME: The Citrus Hill Manufacturing Co. COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Erie City Boiler

SOURCE LOCATION: Street State Road 60 West City Bartow
UTM: East _____ North _____
Latitude 27 ° 51 ' 23 "N Longitude 81 ° 53 ' 50 "W

APPLICANT NAME AND TITLE: W. K. Miller, Plant Manager
APPLICANT ADDRESS: P. O. Box 2000, Frostproof, FL 33843

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Citrus Hill Mfg. Co.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

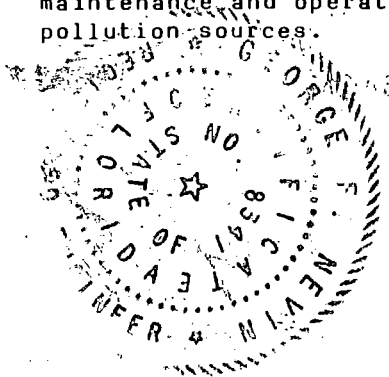
*Attach letter of authorization Signed: _____
W. K. Miller, Plant Manager
Name and Title (Please Type)
Date: _____ Telephone No. 813-635-2211

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed George F. Nevin

George F. Nevin
Name (Please Type)

Watkins Engineers & Constructors
Company Name (Please Type)

P.O. Box 2194; Tallahassee, FL 32316
Mailing Address (Please Type)

Florida Registration No. 8341 Date: 8/25/88 Telephone No. 904-576-7181

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This boiler is an existing boiler and is to be used to supplement the three (3) Va-powered boilers during the winter months. It is fueled by natural gas and will be in compliance with all applicable State of Florida regulations.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction N/A Completion of Construction _____

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

N/A

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

E. Requested permitted equipment operating time: hrs/day 18; days/wk 5.5; wks/yr 32;
if power plant, hrs/yr _____; if seasonal, describe: 3168 hours per year
Approximately October through May 15th each year

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? No
 - a. If yes, has "offset" been applied? _____
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? _____
 - c. If yes, list non-attainment pollutants. _____
 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. _____
 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. No
 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? No
 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? No
- H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? No
- a. If yes, for what pollutants? _____
 - b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable: N/A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): N/A

2. Product Weight (lbs/hr): N/A

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
PM	.145	.23			459	.23	
SO ₂	.017	.027			54	.027	
NO _x	4.06	6.4			12862	6.4	
CO ₂	1.02	1.6			3231	1.6	
VOC	.17	.27			539	.27	

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input).

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas	.02900	.02900	29.0

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: 1000 BTU/^{ft}₃ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 150 ft. Stack Diameter: 6.5 ft.
 Gas Flow Rate: 13525 ACFM 6996 DSCFM Gas Exit Temperature: 530 °F.
 Water Vapor Content: 8.36 % Velocity: 6.79 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

- A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
- Yes No

Contaminant	Rate or Concentration

- B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)
- Yes No

Contaminant	Rate or Concentration

- C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

- D. Describe the existing control and treatment technology (if any).

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft. b. Diameter: ft.

c. Flow Rate: ACFM d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device: b. Operating Principles:

c. Efficiency:¹ d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy:² h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device: b. Operating Principles:

c. Efficiency:¹ d. Capital Cost:

e. Useful Life: f. Operating Cost:

g. Energy:² h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

ERIE CITY BOILER - Natural Gas

Emission Calculations

Basis Fuel Consumption: 29×10^6 BTU/hr. (28.944×10^6 actual)

Hours of Operation: 3168 hr./yr.

Particulate

$$\frac{5 \text{ lb}}{1,000,000} \times 29000 \frac{\text{ft}^3}{\text{hr}} = .145 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 459 \frac{\text{lb}}{\text{yr}}$$
$$\frac{459}{2000} = .23 \frac{\text{ton}}{\text{yr}}$$

(SO₂)

Sulphur Dioxide

$$\frac{.6 \text{ lb}}{1,000,000} \times 29000 \frac{\text{ft}^3}{\text{hr}} = .017 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 54 \frac{\text{lb}}{\text{yr}}$$
$$\frac{54}{2000} = .027 \frac{\text{ton}}{\text{yr}}$$

(NO_x)

Nitrogen Oxide

$$\frac{140 \text{ lb}}{1,000,000} \times 29000 \frac{\text{ft}^3}{\text{hr}} = 4.06 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 12862 \frac{\text{lb}}{\text{yr}}$$
$$\frac{12862}{2000} = 6.4 \frac{\text{ton}}{\text{yr}}$$

(CO₂)

Carbon Monoxide

$$\frac{35 \text{ lb}}{1,000,000} \times 29000 \frac{\text{ft}^3}{\text{hr}} = 1.02 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 3231 \frac{\text{lb}}{\text{yr}}$$
$$\frac{3231}{2000} = 1.6 \frac{\text{ton}}{\text{yr}}$$

(VOC)

Volatile Organics

$$\frac{5.8 \text{ lb}}{1,000,000} \times 29000 \frac{\text{ft}^3}{\text{hr}} = .17 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 539 \frac{\text{lb}}{\text{yr}}$$
$$\frac{539}{2000} = .27 \frac{\text{ton}}{\text{yr}}$$

(Emission Factors from AP-42, Table 1.4-1)
1157c/sc

BARTON BOILERS FUEL CONSUMPTION DATA

(A) ERIE CITY BOILER

- ACTUAL HIGH FIRE (MAXIMUM) FUEL INPUT BY OBSERVATION OF FLA. GAS CO. METER IS 300 ACTUAL FT³ IN 62 SEC OR 17,419 ACF/HR.
- THIS MUST BE CORRECTED BY THE METERING PRESSURE OF 9.2 PSIG. THE CORRECTION FACTOR IS THE RATIO OF THE ABSOLUTE PRESSURES OR

$$\frac{9.2 + 14.7}{14.7} = 1.626$$

- THE HIGHER HEATING VALUE TYPICALLY RUNS 1022 BTU/SCF (FROM MONTHLY INVOICE)
- THEREFORE THE MAXIMUM HEAT INPUT IS

$$(17,419)(1.626)(1022) = 28.944 \times 10^6 \text{ BTU/HR}$$

$$\underline{\text{USE } 29 \times 10^6 \text{ BTU/HR}}$$

(B) THREE VA-POWER MODULATIC BOILERS RATED 150 HP EACH

- MAXIMUM FUEL INPUT PER ATTACHED MANUFACTURER'S DATA SHEET IS 6800 SCF/HR EACH, THEREFORE THE TOTAL MAXIMUM HEAT INPUT IS:

$$(3)(6800)(1000) = \underline{20.4 \times 10^6 \text{ BTU/HR}}$$

CR 10

2-8-88

MODULATIC® Packaged Once-thru Steam Generators

Va-Power designs, manufactures and distributes a complete line of packaged steam generators and hot oil heaters for general industrial applications worldwide. With over 45,000 units installed, the Va-Power name has come to mean quality, technical superiority and engineering excellence. **Modulatic** steam generators are skid mounted and completely packaged; all pumps, burners and required safety and operating devices are supplied, installed and pre-tested.

DESIGN DETAILS

General Information

Manufacturer _____ Va-Power
 Type of Boiler _____ Watertube
 Model Series _____ 4742
 Rated Capacity _____ 150 BHP (1471 KW)
 Equivalent Evaporation _____ 5175 lb/hr from and at 212°F
 (2347 kg/hr from and at 100°C)
 Thermal Output _____ 5,021,000 Btu/hr (1.265.292 k cal/hr)
 Construction Codes _____ ASME, Hartford, National Board
 Operating Water
 Capacity _____ 24 gal (91 lit)
 Boiler Shell Insulation _____ Mineral Wool Insulation
 Approx. Shipping
 Weight _____ 7200 lbs (3266 kg)

Pressures PSIG (k Pa)

Design	Operating
15 (103)	5— 13 (34—90)
300 (2068)	75—250 (517—1724)
600 (4137)	200—540 (1379—2723)
900 (6205)	400—810 (2758—5585)

Controls

Steam Pressure, Low Water and Flame Failure Protection, Temperature Limit.

Heat Exchanger

Series connected multiple coil assembly.

Burner

Manufacturer _____ Va-Power
 Fuel _____ Oil, Gas or Combination
 Type (oil) _____ Air Atomized
 Type (gas) _____ Multiple Orifice Nozzle
 Fuel Specifications:
 Oil (No. 2 CSG) _____ 141,000 Btu/U.S. gal (9386 k cal/lit)
 Gas _____ 1000 Btu/cu ft (8899 k cal/m³)
 Main Burner _____ 1 PSIG (6.9 k Pa)
 Pilot Burner _____ 4" W.C. (1.0 k Pa)
 Ignition Type _____ Electric spark—interrupted gas pilot
 Atomizing Air
 Requirements _____ 10 SCFM @ 70 PSIG
 (0.3 m³/min @ 483 k Pa)

Power Requirements

Main Power _____ 230 or 460 VAC, 3 Ph, 60 Hz
 Control Power _____ 115 VAC, 1 Ph, 60 Hz
 Supplied by integral transformer
 HP required by blower and feedwater pump:
 15, 300 PSIG _____ 10.0 HP
 (103, 2068. k Pa) _____ 7.5 KW
 600, 900 PSIG _____ 15.0 HP
 (4137, 6205 k Pa) _____ 11.2 KW

OVERALL DIMENSIONS

L x W x H _____ 100" x 60" x 109"
 (2540 mm x 1524 mm x 2769 mm)
 Approx. Floor Loading
 (Wet) _____ 180 lb/sq ft (879 kg/m²)

PERFORMANCE DATA

Fuel Consumption @ Rated Output

Oil _____ 48 GPH (182 lit/hr)
 Gas _____ 6800 SCFH (193 m³/hr)
 Thermal Efficiency _____ 76% (gas); 80% (oil)
 Turndown Ratio _____ 4 to 1
 Combustion and Ventilating Air Required:
 Oil, Gas _____ 1500 SCFM (42 m³/min)

CUSTOMER CONNECTIONS

Stack Outlet _____ 15" (381 mm) O.D.
 Steam Outlet:
 15 PSIG (103 k Pa) _____ 6" x 150# ANSI
 300, 600, 900 PSIG _____ 2" NPT
 (2068, 4137, 6205 k Pa) _____ 2" NPT
 Main Gas Supply _____ 2" NPT
 Pilot Gas Supply _____ 3/8" NPT
 Oil Supply _____ 3/4" NPT
 Oil Return _____ 1/2" NPT
 Atomizing Air Supply _____ 1/4" NPT
 Feedwater Inlet _____ 2" NPT
 Feedwater Return _____ 3/4" NPT
 Blowdown Outlet, (2) _____ 1" NPT
 Fill Test Valve _____ 1/2" NPT
 Water Pump Relief Valve _____ 1/2" NPT
 Trap Return:
 15, 300, 600 PSIG _____ 1" NPT
 (103, 2068, 4137 k Pa) _____ 1" NPT
 Safety Valve Outlet:
 15 PSIG (103 k Pa) (two) _____ 2 1/2" NPT
 300, 600 PSIG _____ 1 1/2" NPT
 (2068, 4137, k Pa) _____ 1 1/2" NPT
 900 PSIG (6205 k Pa) _____ 1 1/4" NPT

For more information on the **Modulatic**, see descriptive bulletin No. 5010

Specifications subject to change without notice.

"The Experienced Source For Process Heat"®



Va-Power
312/631-9200

#100 pd.

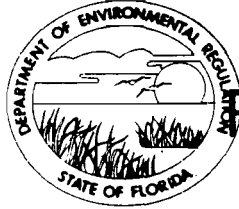
AC53-154793

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

7601 HIGHWAY 301 NORTH
TAMPA, FLORIDA 33610



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

WILLIAM K. HENNESSEY
DISTRICT MANAGER

RECEIVED

SEP 15 1988

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

DER-BAQM

SOURCE TYPE: Boiler [] New¹ [X] Existing¹

APPLICATION TYPE: [X] Construction [] Operation [] Modification

COMPANY NAME: The Citrus Hill Manufacturing Company COUNTY: Polk

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) #1 Va-power boiler

SOURCE LOCATION: Street State Road 60 West City Bartow

UTM: East _____ North _____

Latitude 27 ° 51 ' 23 "N Longitude 81 ° 53 ' 50 "W

APPLICANT NAME AND TITLE: W. K. Miller, Plant Manager

APPLICANT ADDRESS: P. O. Box 2000, Frostproof, FL 33843

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of The Citrus Hill Mfg. Co.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

W. K. Miller, Plant Manager

Name and Title (Please Type)

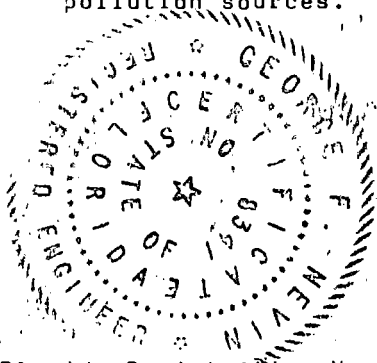
Date: _____ Telephone No. 813-635-2211

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed George F. Nevin

George F. Nevin
Name (Please Type)

Watkins Engineers & Constructors
Company Name (Please Type)

P.O. Box 2194; Tallahassee, FL 32316
Mailing Address (Please Type)

Florida Registration No. 8341 Date: 8/25/88 Telephone No. 904-576-7781

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This boiler was installed as one of three (3) such boilers, to be used as the primary source of steam for the canning plant. The boilers will be fueled by using natural gas and will be in compliance with all applicable State of Florida regulations.

B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction N/A Completion of Construction _____

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)
N/A

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.
None

E. Requested permitted equipment operating time: hrs/day 18; days/wk 5.5; wks/yr 32; if power plant, hrs/yr _____; if seasonal, describe: 3168 hours per year.

Approximately October through May 15th each year.

F. If this is a new source or major modification, answer the following questions. (Yes or No)

- 1. Is this source in a non-attainment area for a particular pollutant? No
 - a. If yes, has "offset" been applied? _____
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? _____
 - c. If yes, list non-attainment pollutants. _____
- 2. Does best available control technology (BACT) apply to this source? If yes, see Section VI. No
- 3. Does the State "Prevention of Significant Deterioration" (PSD) requirement apply to this source? If yes, see Sections VI and VII. No
- 4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source? No
- 5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

- H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No
- a. If yes, for what pollutants? _____
 - b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

B. Process Rate, if applicable: (See Section V, Item 1)

- 1. Total Process Input Rate (lbs/hr): N/A
- 2. Product Weight (lbs/hr): N/A

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
PM	.034	.054			108	.054	
SO ₂	.004	.006			12.7	.006	
NOx	.952	1.5			3016	1.5	
CO ₂	.238	.38			754	.38	
VOC	.039	.06			124	.06	

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas	.0068	.0068	6.8

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: 1000 BTU/~~ft~~^{ft³} BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 45 ft. Stack Diameter: 1.25 ft.
 Gas Flow Rate: 2520 ACFM 1201 DSCFM Gas Exit Temperature: 600 °F.
 Water Vapor Content: 11.25 % Velocity: 34.2 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft. b. Diameter: ft.
- c. Flow Rate: ACFM d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device: b. Operating Principles:
- c. Efficiency:¹ d. Capital Cost:
- e. Useful Life: f. Operating Cost:
- g. Energy:² h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device: b. Operating Principles:
- c. Efficiency:¹ d. Capital Cost:
- e. Useful Life: f. Operating Cost:
- g. Energy:² h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:¹

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:²

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:¹

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:²

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? [] Yes [] No
- b. Was instrumentation calibrated in accordance with Department procedures?
[] Yes [] No [] Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year
- 2. Surface data obtained from (location) _____
- 3. Upper air (mixing height) data obtained from (location) _____
- 4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

- 1. _____ Modified? If yes, attach description.
- 2. _____ Modified? If yes, attach description.
- 3. _____ Modified? If yes, attach description.
- 4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO ²	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

(3) VA-POWERED BOILERS - Natural Gas

Emission Calculations

Basis Fuel Consumption: 6.8×10^6 BTU/hr.

Hours of Operation: 3168 hr./yr.

Particulate

$$\frac{5 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .034 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 108 \frac{\text{lb}}{\text{yr}}$$
$$\frac{108}{2000} = .054 \frac{\text{ton}}{\text{yr}}$$

(SO₂)

Sulphur Dioxide

$$\frac{.6 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .004 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 12.7 \frac{\text{lb}}{\text{yr}}$$
$$\frac{12.7}{2000} = .006 \frac{\text{ton}}{\text{yr}}$$

(NO_x)

Nitrogen Oxide

$$\frac{140 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .952 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 3016 \frac{\text{lb}}{\text{yr}}$$
$$\frac{3016}{2000} = 1.5 \frac{\text{ton}}{\text{yr}}$$

(CO₂)

Carbon Monoxide

$$\frac{35 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .238 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 754 \frac{\text{lb}}{\text{yr}}$$
$$\frac{754}{2000} = .38 \frac{\text{ton}}{\text{yr}}$$

(VOC)

Volatile Organics

$$\frac{5.8 \text{ lb}}{1,000,000} \times 6800 \frac{\text{ft}^3}{\text{hr}} = .039 \frac{\text{lb}}{\text{hr}} \times 3168 \frac{\text{hr}}{\text{yr}} = 124 \frac{\text{lb}}{\text{yr}}$$
$$\frac{124}{2000} = .06 \frac{\text{ton}}{\text{yr}}$$

BARTON BOILERS FUEL CONSUMPTION DATA

(A) ERIE CITY BOILER

- ACTUAL HIGH FIRE (MAXIMUM) FUEL INPUT BY OBSERVATION OF FLA. GAS CO. METER IS 300 ACTUAL FT³ IN 62 SEC OR 17,419 ACF/HR.

- THIS MUST BE CORRECTED BY THE METERING PRESSURE OF 9.2 PSIG. THE CORRECTION FACTOR IS THE RATIO OF THE ABSOLUTE PRESSURES OR

$$\frac{9.2 + 14.7}{14.7} = 1.626$$

- THE HIGHER HEATING VALUE TYPICALLY RUNS 1022 BTU/SCF (FROM MONTHLY INVOICE)

- THEREFORE THE MAXIMUM HEAT INPUT IS

$$(17,419)(1.626)(1022) = 28.944 \times 10^6 \text{ BTU/HR}$$

$$\underline{\text{USE } 29 \times 10^6 \text{ BTU/HR}}$$

(B) THREE VA-POWER MODULATIC BOILERS RATED 150 HP EACH

- MAXIMUM FUEL INPUT PER ATTACHED MANUFACTURER'S DATA SHEET IS 6800 SCF/HR EACH, THEREFORE THE TOTAL MAXIMUM HEAT INPUT IS:

$$(3)(6800)(1000) = \underline{20.4 \times 10^6 \text{ BTU/HR}}$$

CR10

2-8-88

MODULATIC® Packaged Once-thru Steam Generators

Va-Power designs, manufactures and distributes a complete line of packaged steam generators and hot oil heaters for general industrial applications worldwide. With over 45,000 units installed, the Va-Power name has come to mean quality, technical superiority and engineering excellence. **Modulatic** steam generators are skid mounted and completely packaged; all pumps, burners and required safety and operating devices are supplied, installed and pre-tested.

DESIGN DETAILS

General Information

Manufacturer _____ Va-Power
 Type of Boiler _____ Watertube
 Model Series _____ 4742
 Rated Capacity _____ 150 BHP (1471 KW)
 Equivalent Evaporation _____ 5175 lb/hr from and at 212°F
 (2347 kg/hr from and at 100°C)
 Thermal Output _____ 5,021,000 Btu/hr (1,265,292 k cal/hr)
 Construction Codes _____ ASME, Hartford, National Board
 Operating Water
 Capacity _____ 24 gal (91 lit)
 Boiler Shell Insulation _____ Mineral Wool Insulation
 Approx. Shipping
 Weight _____ 7200 lbs (3266 kg)

Pressures PSIG (k Pa)

Design	Operating
15 (103)	5— 13 (34—90)
300 (2068)	75—250 (517—1724)
600 (4137)	200—540 (1379—2723)
900 (6205)	400—810 (2758—5585)

Controls

Steam Pressure, Low Water and Flame Failure Protection, Temperature Limit.

Heat Exchanger

Series connected multiple coil assembly.

Burner

Manufacturer _____ Va-Power
 Fuel _____ Oil, Gas or Combination
 Type (oil) _____ Air Atomized
 Type (gas) _____ Multiple Orifice Nozzle
 Fuel Specifications:
 Oil (No. 2 CSG) _____ 141,000 Btu/U.S. gal (9386 k cal/lit)
 Gas _____ 1000 Btu/cu. ft (8899 k cal/m³)
 Main Burner _____ 1 PSIG (6.9 k Pa)
 Pilot Burner _____ 4" W.C. (1.0 k Pa)
 Ignition Type _____ Electric spark—interrupted gas pilot
 Atomizing Air
 Requirements _____ 10 SCFM @ 70 PSIG
 (0.3 m³/min @ 483 k Pa)

Power Requirements

Main Power _____ 230 or 460 VAC, 3 Ph, 60 Hz
 Control Power _____ 115 VAC, 1 Ph, 60 Hz
 Supplied by integral transformer
 HP required by blower and feedwater pump:
 15, 300 PSIG _____ 10.0 HP
 (103, 2068. k Pa) _____ 7.5 KW
 600, 900 PSIG _____ 15.0 HP
 (4137, 6205 k Pa) _____ 11.2 KW

OVERALL DIMENSIONS

L x W x H _____ 100" x 60" x 109"
 (2540 mm x 1524 mm x 2769 mm)
 Approx. Floor Loading
 (Wet) _____ 180 lb/sq. ft (879 kg/m²)

PERFORMANCE DATA

Fuel Consumption @ Rated Output

Oil _____ 48 GPH (182 lit/hr)
 Gas _____ 6800 SCFH (193 m³/hr)
 Thermal Efficiency _____ 76% (gas); 80% (oil)
 Turndown Ratio _____ 4 to 1
 Combustion and Ventilating Air Required:
 Oil, Gas _____ 1500 SCFM (42 m³/min)

CUSTOMER CONNECTIONS

Stack Outlet _____ 15" (381 mm) O.D.
 Steam Outlet:
 15 PSIG (103 k Pa) _____ 6" x 150# ANSI
 300, 600, 900 PSIG _____ 2" NPT
 (2068, 4137, 6205 k Pa) _____ 2" NPT
 Main Gas Supply _____ 2" NPT
 Pilot Gas Supply _____ 3/8" NPT
 Oil Supply _____ 3/4" NPT
 Oil Return _____ 1/2" NPT
 Atomizing Air Supply _____ 1/4" NPT
 Feedwater Inlet _____ 2" NPT
 Feedwater Return _____ 3/4" NPT
 Blowdown Outlet, (2) _____ 1" NPT
 Fill Test Valve _____ 1/2" NPT
 Water Pump Relief Valve _____ 1/2" NPT
 Trap Return:
 15, 300, 600 PSIG _____ 1" NPT
 (103, 2068, 4137 k Pa) _____ 1" NPT
 Safety Valve Outlet:
 15 PSIG (103 k Pa) (two) _____ 2 1/2" NPT
 300, 600 PSIG _____ 1 1/2" NPT
 (2068, 4137, k Pa) _____ 1 1/2" NPT
 900 PSIG (6205 k Pa) _____ 1 1/4" NPT

For more information on the **Modulatic**, see descriptive bulletin No. 5010

Specifications subject to change without notice.

"The Experienced Source For Process Heat"®

Va-Power
312/631-9200