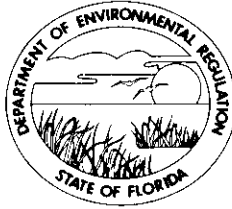


STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 13, 1984

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Mitchell Larkins
Vice President, General Manager
Timber Energy Resources
Post Office Box 725
Highway 20
Bristol, Florida 32321

Permit not mailed

Dear Mr. Larkins:

Enclosed is Permit Number AC 39-090091, dated November 8, 1984, to Timber Energy Resources issued pursuant to Section 403, Florida Statutes.

Acceptance of this permit constitutes notice and agreement that the department will periodically review this permit for compliance, including site inspections where applicable, and may initiate enforcement actions for violation of the conditions and requirements thereof.

Sincerely,

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

CHF/pa

Enclosure

cc: William A. Tomb, Perry Smith Company, Inc.
Tom Moody, DER Northwest District

Final Determination

Timber Energy Resources
Carbonaceous Fuel Fired Boiler

Liberty County, Florida

Permit Number
AC 39-090091

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

November 5, 1984

Final Determination
Timber Energy Resources
AC 39-090091

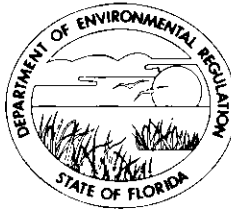
Timber Energy Resources' permit application for the construction of a carbonaceous fuel boiler at the company's existing plant site in Bristol, Florida has been reviewed by the Bureau of Air Quality Management. Public notice of the department's intent to issue has been published in the Liberty Journal on October 3, 10, and 17, 1984. Copies of the preliminary determination were available for public inspection at DER's Northwest District in Pensacola and the Bureau of Air Quality Management in Tallahassee.

There were no letters of response as a result of the public notice period.

The final action of the department will be to issue the permit (AC 39-090091) as noticed in the review process.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Timber Energy Resources
P. O. Box 725
Highway 20
Bristol, Florida 32321

Permit Number: AC 39-090091
Date of Issue:
Expiration Date: September 30, 1985
County: Liberty
Latitude/Longitude: 30° 20' 17"N/
84° 49' 20"W
Project: 129 MMBtu/hr Bark/Wood
Boiler

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 drawings, plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the construction of a carbonaceous fuel, bark and waste wood, fired boiler with a heat input capacity of 129 million Btu per hour at Telogia, in Liberty County, Florida.

Construction shall be in accordance with the attached permit application and additional information except as otherwise noted on pages 5 and 6, specific conditions.

Attachments:

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16), received on April 18, 1984.
2. Additional information from Perry Smith Co., received on July 20, 1984.
3. The letter from Mr. Mitchell Larkins, received on August 6, 1984.

PERMITTEE:
Timber Energy Resources

I. D. Number:
Permit Number:AC 39-090091
Date of Issue:
Expiration Date: Sept. 30, 1985

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:
Timber Energy Resources

I. D. Number:
Permit Number: AC 39-090091
Date of Issue:
Expiration Date: Sept. 30, 1985

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 noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

PERMITTEE:
Timber Energy Resources

I. D. Number:
Permit Number: AC 39-090091
Date of Issue:
Expiration Date: Sept. 30, 1985

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:
Timber Energy Resources

I. D. Number:
Permit Number: AC 39-090091
Date of Issue:
Expiration Date: Sept. 30, 1985

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 subject boiler is allowed to operate up to 24 hours per day, 7 days per week, 50 weeks per year, or 8,400 hours per year.
2. The boiler is only allowed to burn bark and waste wood. No fossil fuel shall be fired in the boiler.
3. The allowable heat input of the boiler is 129 million Btu per hour.

PERMITTEE:
Timber Energy Resources

I. D. Number:
Permit Number: AC 39-090091
Date of Issue:
Expiration Date: Sept. 30, 1985

SPECIFIC CONDITIONS:

4. The venturi scrubber and separator shall maintain proper pressure drops in order to keep high efficiency. The minimum pressure drops in the scrubber and the separator for compliance shall be determined in the compliance test. The operating permit shall address the minimum pressure drops as a specific condition. Continuous records of pressure drops shall be kept for state agency's inspection.
5. The allowable particulate emission limit from the boiler is 0.2 lb/MMBtu. EPA Method 5 shall be used for the compliance test conducted by the permittee.
6. The allowable visible emissions from the boiler are 30% opacity except that 40% opacity is permissible for not more than two minutes in any one hour. DER Method 9 (17-2.700(b)(a)9, FAC) shall be used for the compliance test conducted by the permittee.
7. The fugitive dust emissions from the bottom dry ash and multiclone dry ash handling areas shall be properly controlled. Opacity in these areas shall not exceed 5%.
8. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating or spraying roads and the construction site, shall be taken by the permittee.
9. The compliance tests shall be conducted within 10 percent of the maximum heat input of 129 MMBtu/hr.
10. A complete operation and maintenance plan shall be submitted to the Northwest District with the certificate of completion of construction as required by Rule 17-2.650(2)(g), FAC.
11. The permittee shall demonstrate compliance with the conditions of this construction permit and submit a complete application for an operating permit to the Northwest District prior to 90 days before the expiration date of this permit. The permittee may continue to operate in compliance with all terms of this construction permit until its expiration or until issuance of an operating permit.

PERMITTEE:
Timber Energy Sources

Permit Number: AC 39-09001
Date of Issue:
Expiration Date: Sept. 30, 1985

SPECIFIC CONDITIONS:

Issued this 8 day of Nov, 1987.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. ASCHINKEL, Secretary

___ pages attached.

DER

NOV 9 1984

State of Florida


DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

BAQM

| For Routing To District Offices And/Or To Other Than The Addressee | | |
|---|--------------------|----------------|
| To: <u>Clair Fancy</u> | Loctn.: | |
| To: _____ | Loctn.: | |
| To: _____ | Loctn.: | |
| From: <u>Vechi</u> | Date: | <u>11/8</u> |
| Reply Optional [] | Reply Required [] | Info. Only [] |
| Date Due: _____ | Date Due: _____ | |

TO: Victoria J. Tschinkel

FROM: Clair Fancy 

DATE: November 5, 1984

SUBJ: Approval of Attached Air Construction Permit

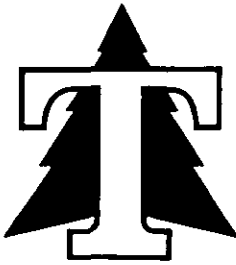
Attached for your approval and signature is one Air Construction Permit for Timber Energy Resources. The permit is for the construction of a carbonaceous fuel fired boiler at the company's existing facility in Bristol, ~~Calhoun~~ ^{Liberty} County, Florida.

Day 90, after which the permit would be issued by default, is December 22, 1984.

The Bureau recommends your approval and signature.

CF/pa

Attachments



NOV 13 1984

November 13, 1984

Mr. Larry George
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Sir,

This is a request to amend the construction permit, number AC 39-090091, for Timber Energy Resources, Inc. at Telogia, Florida, from 128.92 MBTU/HR to 229.8 MBTU/HR. The fuel mixture will be bark and wood waste with a heating capacity of 4500 BTU/LB. The analysis of the fuel will be the same. The expected boiler performance fuel flow will be 50,787 LB/HR. The heat input will be 229.8 MBTU/HR. The boiler efficiency will be 68%. The boiler will be provided with a horizontal venturi type wet particulate scrubber. Particulate emissions from the scrubber are guaranteed to meet the requirements of Florida (0.2 #/MMBTU).

Sincerely,

Mitchell Larkins
Vice-President, General Manager
Timber Energy Resources, Inc.

ML/amp

Attachments

TIMBER ENERGY RESOURCES, INC.

5433 WESTHEIMER

• HOUSTON, TEXAS 77056 •

713/621-5018

A

Section II

DESIGN CONDITIONS AND PLANT PERFORMANCE

The performance of the plant is predicated upon Timber Energy Resources, Inc. providing hogged wood residue of sufficient quantity and quality, delivered to the loading hopper with the following characteristics:

Ultimate Analysis of Fuel

| Fuel | Approximate Percent by Weight |
|------------------|----------------------------------|
| Ash | 0.36 |
| Sulphur | 0.00 |
| Hydrogen | 3.55 |
| Carbon | 27.90 |
| Nitrogen | 0.00 |
| Oxygen | 18.19 |
| Water | 50.00 |
| Total | 100.00 |
| BTU/LB, as fired | 4500.00 |

Expected Boiler Performance

| | | |
|--------------------|--------|--------|
| Fuel flow LB/HR | 50,787 | 79,836 |
| Heat input MBTU/HR | 229.8 | 229.8 |
| Boiler efficiency | 68% | |

Operating Conditions

| | |
|---------------------------------------|-----------|
| Plant output at full-condensing (net) | 11,480 KW |
| Atmospheric dry bulb temperature of | 80° F |
| Atmospheric wet bulb temperature of | 78° F |
| Atmospheric pressure-PSIG | 14.7 |
| Turbine Exhaust Pressure in HgA | 2.5 |
| Power Factor | .85 |

Assumed Water Analysis

| | PPM |
|---|-----|
| Calcium (C _A CO ₃) | 163 |
| Sodium | 51 |
| Total Cations | 214 |
| Bicarbonates | 145 |
| Sulfates | 41 |
| Chlorides | 28 |
| Total Anions | 214 |
| Total Hardness | 163 |
| Alkalinity | 145 |
| PH | 7.8 |
| Silicates | 0.0 |

Generator output will be between 10,750 KW and 12,725 KW, depending on the extraction load. Auxiliary plant loads are estimated to be 1,245 KW averaged over a 24 hour period while the plant is operating at full condensing load (no extraction to process). Based on these figures and the numbers presented above, the guaranteed plant output will be 11,480 KW averaged over a 24 hours period, full condensing load. This output may change if the plant auxiliary loads are altered during final engineering and detailed design. The overall heat balance for the plant is shown on drawing M200 Rev.

In order to verify guaranteed output, the plant will be operated at full load for 24 hours duration. The resulting kilowatt output will be averaged for the 24 hour period. This test will be performed within 30 days of completion of the Contract Period.

As quoted, the plant will meet the existing Florida DER environmental regulations. The Contractor is not liable for added costs resulting from changes in Florida DER regulations imposed after September 1, 1984.

PLANT OPERATION UNDER CONDITIONS OTHER THAN THOSE SPECIFIED ABOVE WILL CAUSE PLANT OUTPUT, HEAT RATE, AND PRICE, TO VARY.

c

access door, poke hole and rotary seal feeder with high temperature seals. Each rotary valve is provided with a stop motion detector to indicate a broken shear pin or other similar malfunction.

III.D.12 WET SCRUBBER AND SETTLING POND

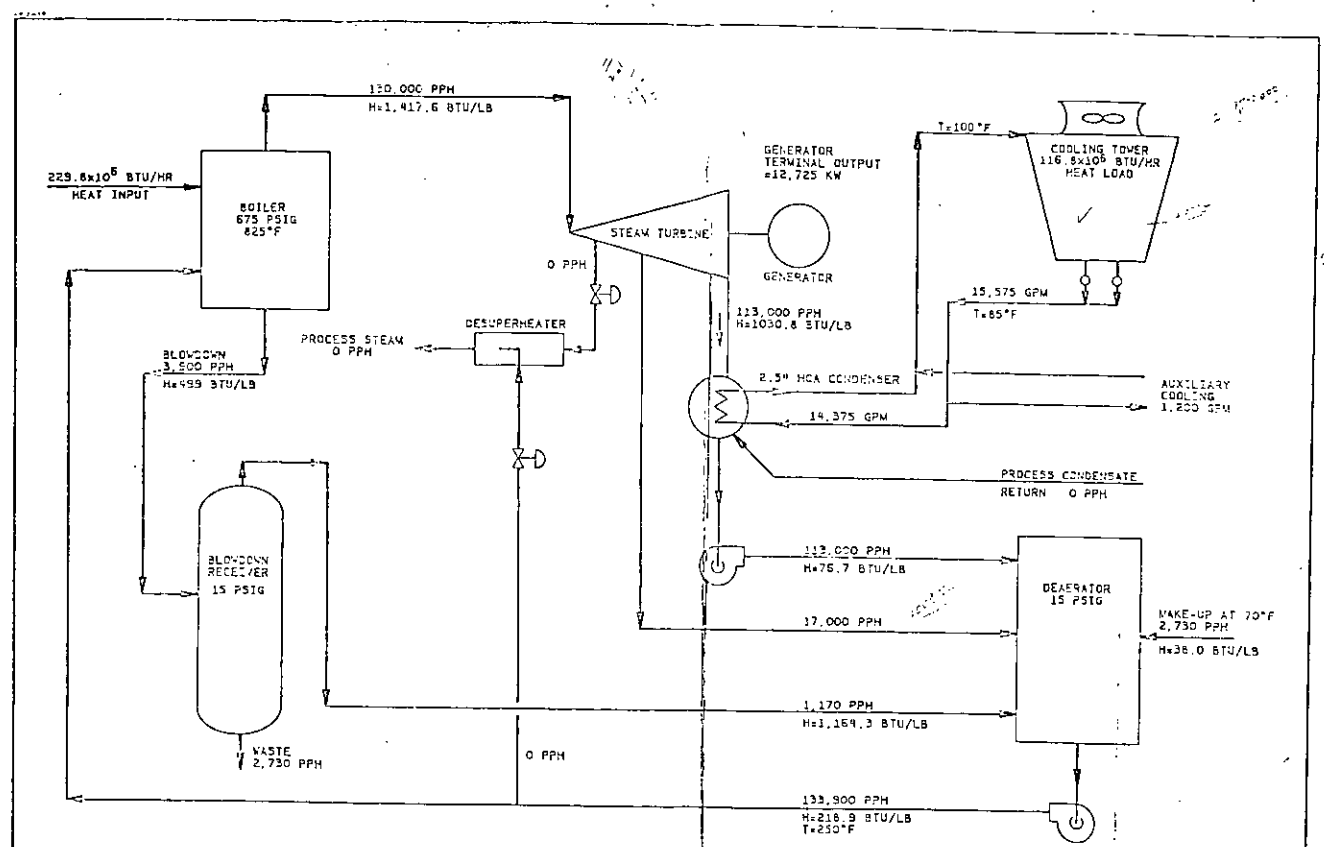
The boiler will be provided with a horizontal venturi type wet particulate scrubber. Particulate emissions from the scrubber are guaranteed to meet the requirements of Florida (0.2 #/MMBTU).

The scrubber effluent will flow by gravity to two (2) settling ponds and will be recirculated to the scrubber from a self-priming recirculation pump located at the ponds. The settling ponds shall each be approximately 100' x 50' x 6' deep, concrete lined and located at a maximum distance of 200' from the scrubber. Design includes wet well, pump foundations, crossover weir and cleanout access. All piping and electrical equipment shall be provided to and from the scrubber and ponds, and water level will be controlled by a float valve.

III.D.13 ASH CLASSIFICATION AND REINJECTION

The classification and reinjection system shall consist of, but not be limited to, the following components:

- A. One (1) rear boiler pass hopper to be located beneath the boiler mud drum, including ash removal screw and rotary seal valve.
- B. Three (3) rotary seal valves; two to be located at the discharge of the dust collector outlet hoppers and the third to be located on the rear boiler pass hopper.
- C. One (1) refractory lined front ash hopper with five (5) fire doors and five (5) ash doors for manual ash removal from the front ash hopper.



NOTE:
THIS DRAWING IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE DURING FINAL ENGINEERING.

PRELIMINARY:
HEAT BALANCE WITH NO PROCESS STEAM

GENERAL ELECTRIC

120,000 FIRMED POWER PLANT
TIMBER ENERGY RESOURCES, INC.
BLCUNISTOWN, FLORIDA

PROJECT AND WORKING DRAWING
DATE: 08/15/82
65M9915C 1201 A

Handwritten notes:
229.8 x 10⁶ BTU/hr
116.8 x 10⁶ BTU/hr
12,725 kW
15.575 GPM
14,375 GPM
1,200 GPM
15 PSIG
2,730 PPH
1,170 PPH
133,900 PPH
T=100°F
T=85°F
T=250°F

Handwritten notes:
113,000 PPH
H=1050.8 BTU/LB
2.5" HCA CONDENSER
14,375 GPM
PROCESS CONDENSATE RETURN 0 PPH
113,000 PPH
H=76.7 BTU/LB
17,000 PPH
1,170 PPH
H=1,164.3 BTU/LB
133,900 PPH
H=216.9 BTU/LB
T=250°F

REVISED

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |

| | | | |
|-------------|-------------|------|-------|
| DESIGNED BY | CHECK BY | DATE | SCALE |
| DRAWN BY | APPROVED BY | | |
| TITLE | | | |
| PROJECT NO. | | | |
| REV. NO. | | | |
| DATE | | | |