Florida Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

August 18, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey Pardue, C.E.P., Manager-Environmental Programs
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

Dear Mr. Pardue:

The Department received your request for extension of the construction permit referenced below. The permit is amended as shown.

Permit No. AC09-162037, PSD-FL-139 - Crystal River Cooling Towers

Current Expiration Date: October 1, 1993
New Expiration Date: December 1, 1993

This letter shall become an attachment to this permit.

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 their 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 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 action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application 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 receipt of this intent 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 28-5.207, F.A.C.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources Management

HLR/JR/bb

cc: B. Thomas SWD
J. Harper, EPA
J. Bunyak, NPS

P 230 524 386

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to: Mr. Jeffrey Pardue, C.E.P.	
Street and No: P. O. Box 14042	
P.O., State and ZIP Code: St. Petersburg, FL 33733	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date: Mailed: 8/25/93 AC 09-162307 PSD-FL-139	

PS Form 3800, June 1991

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. JEffrey Pardue, C.E.P.
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

4a. Article Number: P 230 524 386

4b. Service Type
☐ Registered ☐ Insured
XX Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery: AUG 27 1993

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1992—323-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

March 19, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

162037

Mr. Scott Osbourn, H2G
Florida Power Corporation
3201 34th Street, South
St. Petersburg, Florida 33711

Dear Mr. Osbourn:

RE: Request for Material Related to Testing and Research While Firing Used Tires as a Supplement to Coal at the Crystal River Facility

Based on your request, we are enclosing information related to the testing and research of used tires being fired as a supplement to coal. Also, there is a requirement that the request and proposed testing protocol be sealed by a registered Florida P.E., who will also oversee the activity; in addition, there is a $250.00 amendment processing fee required.

If there are any questions, please call Mr. Preston Lewis at (904)488-1344 or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/rbm

Enclosures

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Scott Osbourn, H2G
FIA: Power Corp
3201 34th St. S.
St. Pete, Fl 33711

4a. Article Number
P 062 921 979

4b. Service Type
☒ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
3/22/93

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, November 1990 * U.S. GPO: 1991—287-066 DOMESTIC RETURN RECEIPT

P 062 921 979

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to Scott Osbourn	
Street and No. FIA Power Corp	
P.O., State and ZIP Code St. Pete, Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date CRF	3-19-93

PS Form 3800, June 1991

Example

TEST PROTOCOL FOR WHOLE TIRE DERIVED FUEL TEST BURN

The following sections describe the test methods and the protocol to be used to evaluate the emission changes that may occur as a result of burning whole tires in the cement kilns.

Coal/Tire Derived Fuel Burning Test Series

A. Up to 40 percent heat input to the kiln will be whole tire derived fuel with the balance using coal.

B. Test series will require two to three days to complete

C. Data to be monitored to document kiln operation:

- Coal feed rate (tons/hr)
- Tire feed rate (tons/hr)
- Raw meal rate (tons/hr)
- Clinker generation (tons/hr)
- Coal end oxygen (percent)
- Coal end temperature (°F)

D. Data to be monitored to document ESP operation:

- Primary voltage
- Primary current
- Secondary voltage
- Secondary current

E. Feed analysis to be monitored:

- Tire analysis (ultimate)
- Coal analysis (ultimate)
- Raw meal analysis (SO_3, K, Na, Cl)
- Clinker analysis (SO_3, K, Na, Cl)

F. Metals to be monitored on:

- Tires (Cr, Pb, Hg, As)
- Coal (Cr, Pb, Hg, As)
- Raw meal (Standard metals, Cr, Pb, Hg, As)
- Clinker (Standard metals, Cr, Pb, Hg, As)

G. Emission Measurements

Pollutant	Method
Particulate Matter	EPA 5
Sulfur Dioxide	EPA 6
Oxygen/Carbon Dioxide	EPA 3 or 3A
Carbon Monoxide	EPA 10
Nitrogen Oxides	EPA 7E
Total Hydrocarbons	EPA 25A
Stack Gas Moisture	EPA 4
Stack Gas Flow	EPA 2
Metals	EPA Multi-metals Train

Baseline Period Series

A. Burn 100 percent coal in the kiln

B. Test series will require two to three days to complete

C. Data to be monitored to document kiln operation:

Coal feed rate (tons/hr)
Raw meal rate (tons/hr)
Clinker generation (tons/hr)
Coal end oxygen (percent)
Coal end temperature (°F)

D. Data to be monitored to document ESP operation:

Primary voltage
Primary current
Secondary voltage
Secondary current

E. Feed analysis to be monitored:

Coal analysis (ultimate)
Raw meal analysis (SO_3, K, Na, Cl)
Clinker analysis (SO_3, K, Na, Cl)

F. Metals to be monitored on:

Coal (Cr, Pb, Hg, As)
Raw meal (Standard metals, Cr, Pb, Hg, As)
Clinker (Standard metals, Cr, Pb, Hg, As)

G. Emission Measurements

Pollutant	Method
Particulate Matter	EPA 5
Sulfur Dioxide	EPA 6
Oxygen/Carbon Dioxide	EPA 3 or 3A
Carbon Monoxide	EPA 10
Nitrogen Oxides	EPA 7E
Total Hydrocarbons	EPA 25A
Stack Gas Moisture	EPA 4
Stack Gas Flow	EPA 2
Metals	EPA Multi-metals Train

PERMITTEE:
Mr. Jerry O'Hare, President
Evergreen Technology, Inc.
1700 E. Las Olas Blvd., Penthouse
Ft. Lauderdale, Florida 33301

I.D. NUMBER: 50/BRO/06/2159
PERMIT/CERTIFICATION NUMBER: AC 06-221883
DATE OF ISSUE: MAR - 9 1993
EXPIRATION DATE: June 1, 1993

Example

SPECIFIC CONDITIONS:

The emission measurements to be conducted are summarized in the following table. This summary includes the parameters that will be measured, the test method that will be used, the number of runs per test and the duration of each run. The results of the testing will be analyzed and submitted to the Department in a report that satisfies all requirements of Rule 17-297, FAC.

Constituent	Test Method	No. of Runs per Test	No. of Tests	Duration of Each Test Run
Particulate Matter	Front half of EPA Method 29 (Multi-metals Train)	3	1	1-hr
Visible Emissions	EPA Method 9	3	1	1-hr
Metals	EPA Method 29 (Multi-metals Train)	3	1	1-hr
Chromium				
Lead				
Zinc				
Nickel				
Aluminum				
Cadmium				
Volatile Organics	VOST (SW846-0030)	3	1	30-mins
Benzene				
Toulene				
Xylene				
Ethylbenzene				
Total VOCs	EPA Method 25A	3(1)	(3)	1-hr
Sulfur Dioxide	EPA Method 6C	3(1)	(3)	1-hr
Nitrogen Oxides	EPA Method 7E	3(1)	(3)	1-hr
Carbon Monoxide	EPA Method 10	3(1)	(3)	1-hr
Stack Gas Flow	EPA Method 2	3(2)	(3)	1-hr
Stack Gas Moisture	EPA Method 4	3(2)	(3)	1-hr
Stack Gas O_2/CO_2	EPA Method 3/3A	3(2)	(3)	1-hr

(1) Measurements will be made concurrent with EPA Method 29 tests.

(2) Measured in conjunction with EPA Method 29 tests.

Stack tests and visible emissions testing shall be performed concurrently.

(3) These measurements will be determined during each demonstration burn.

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                                SOURCE PSD RECORD                          15:44:53
FACIL: OWN: FLORIDA POWER COR  N/L: NORTH OF CRYSTAL  LAST PSD UPDATED: 10/10/91
    # SRC: 013  MAJOR FAC: Y  CITY: CRYSTAL RIVER      STATUS: A = ACTIVE
SRC DESC: FOUR COOLING TOWERS FOR UNITS # 1,2, & 3 AT CRYSTAL
PERMIT/PPS#: AC09 - 162037        MAJOR SRC:           STATUS: C = CONSTRCT
     NSPS:       NESHAP:       111D:       PSD: 139   NAA/NSR:       RACT:
              *****     BASELINE EMISSIONS INFORMATION     *****
              PSD INCREMENT CONSUMING/EXPANDING: C (C,E,N)
SO2: SHORT TERM: _____ . ____ (LB/HR)    ANNUAL: _____ . ____ (TON/YR)
 PM: SHORT TERM: 00200 . 2000 (LB/HR)    ANNUAL: 00432 . 5000 (TON/YR)
NO2: SHORT TERM: _____ . ____ (LB/HR)    ANNUAL: _____ . ____ (TON/YR)

ISSUE DATE: 08 / 29 / 90        LAST PSD PERMIT: DATE: ../../..  NUMBER: 136
  COMMENTS: FOUR_HELPING_COOLING_TOWERS_[_TOTAL_36_STACKS_]_ARE_________
            DESIGNED_TO_COOL_ABOUT_687,000_GPM_OF_WATER_FROM_102.4_F____
            TO_91_F._THERE_ARE_NO_SO2_OR_NOX_EMISSIONS_____________
            ------------------------------------------------------------
            ------------------------------------------------------------
            ------------------------------------------------------------
            ------------------------------------------------------------
MORE PSD ON FILE? YES                          ACTION TAKEN: _   TRANSMIT HERE: _
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AIR034 4OTPA09000413     AIR PROGRAM INFORMATION SYSTEM                  10/10/91
                              SOURCE SCC RECORD                          15:56:35
FACIL: OWN: FLORIDA POWER COR     N/L: NORTH OF CRYSTAL     SCC UPDATED: 10/10/91
     # SRC: 013  MAJOR FAC: Y   CITY: CRYSTAL RIVER      FAC STATUS: A = ACTIVE
SOURC DESC: FOUR COOLING TOWERS FOR UNITS # 1,2, & 3 AT CRYSTAL RIVER
PERMIT/PPS: AC09 - 162037           MAJOR SRC: .        SRC STATUS: C = CONSTRCT
 NSPS: ...    NESHAP: ...    111D: ...    PSD: 139    NAA/NSR: ...    RACT: ...

 SCC NO: 3 - 12 - 999 - 99          31299999
DESCRIP: MACHINERY         MISCELLANEOUS     NOT CLASSIFIED    SEE COMMENT

 MAX HOURLY RATE: ____ . ___      HOURLY RATE LIMIT: ____ . ___
 EST ANNUAL RATE: _______         ANNUAL RATE LIMIT: _______
 RATE UNITS: TONS PROCESSED
 MAX:  % S: _ . __   % ASH: __ . _   MMBTU/UNITS ABOVE: _____  %S LIMIT: _ . __

 ACTUAL FOR AOR YEAR: ..          ANNUAL RATE/UNITS ABOVE: .......
 AVG:  % S: . . ..   % ASH: .. . .   MMBTU/UNITS ABOVE: .....

 COMMENTS: ____________________________________________________________

MORE SOURCE SCC'S ON FILE? NO                ACTION TAKEN: _   TRANSMIT HERE: _
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AIR032 40TPA09000413        AIR PROGRAM INFORMATION SYSTEM                10/11/91
                             SOURCE SCHEDULE/RATE RECORD                  09:26:30
                                                          LAST UPDATED: 10/11/91
FACIL: OWN: FLORIDA POWER COR    N/L: NORTH OF CRYSTAL
     # SRC: 013  MAJOR FAC: Y  CITY: CRYSTAL RIVER          STATUS: A = ACTIVE
  SRC DESC: FOUR COOLING TOWERS FOR UNITS # 1,2, & 3 AT CRYSTAL RIVER
  PERMIT/PPS: AC09 - 162037              MAJOR SRC: .          STATUS: C = CONSTRCT
     NSPS: ...   NESHAP: ...   111D: ...   PSD: 139   NAA/NSR: ...   RACT: ...

              *****     OPERATING SCHEDULE INFORMATION     *****
   TYPICAL OPERATING SCHEDULE: 24 (HR/DAY) 7  (DAY/WK) 25 (WK/YR)
TYPICAL % OPERATION BY SEASON: __ (DJF)    20 (MAM)    50 (JJA)   30 (SON)
 PERMITTED OPERATING SCHEDULE: 24 (HR/DAY) 7  (DAY/WK) 25 (WK/YR) 4320 (HR/YR)
AOR YR: .. OPERATING SCHEDULE: .. (HR/DAY) .  (DAY/WK) .. (WK/YR) .... (HR/YR)

              *****     OPERATING RATE INFORMATION     *****
MAX HEAT INPUT RATE: _______ (MMBTU/HR) FOR BOILERS
   MAX PROCESS RATE: 0735000 UNITS: GPM
MAX PRODUCTION RATE: _______ UNITS: _______________

                                          ACTION TAKEN: _ TRANSMIT HERE: _
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AIR033 4
AIR033 40TPA09000413        AIR PROGRAM INFORMATION SYSTEM                10/11/91
                             SOURCE EMISSION POINT RECORD                 09:36:47
FACIL: OWN: FLORIDA POWER COR  N/L: NORTH OF CRYSTAL  SRC LAST UPDATED: 10/11/91
     # SRC: 013  MAJOR FAC: Y   CITY: CRYSTAL RIVER       STATUS: A = ACTIVE
SRC DESC: FOUR COOLING TOWERS FOR UNITS # 1,2, & 3 AT CRYSTAL RIVER
PERMIT/PPS #: AC09 - 162037            MAJOR SRC: .          STATUS: C = CONSTRCT
     NSPS: ...   NESHAP: ...   111D: ...   PSD: 139   NAA/NSR: ...   RACT: ...

              *****     EMISSION POINT INFORMATION     *****
EMISSION POINT TYPE: 4 = POINTS REGULATED SEPERATELY
STACK HEIGHT: 053 (FT)          EXIT DIA: 34 . 5 (FT)          EXIT TEMP: 0102 (F)
ACTUAL VOLUME FLOW RATE: 1461135 (ACFM)  DRY STANDARD FLOW RATE: _______ (DSCFM)
EXIT VEL: 0026 (FT/SEC)   NONSTK EMIS HT: 50   (FT)  BLDG HT: ____ WD: ____ (FT)
POINT UTM:  EAST: 333 . 75 (KM)    NORTH: 3204 . 05 (KM)   GEP STK HT:  ___ (FT)
COMMENT: THERE ARE 9 CELLS PER TOWER [ 36 STACKS TOTAL ]

              *****     CONTROL EQUIPMENT INFORMATION     *****
CONTROL A: HIGH EFF. DRIFT ELIMINATORS
CONTROL B: ____________________________________________________________
CAPITAL COST: A $ 500000    B $              ANNUALIZED CONTROL COST: $ ________

                                          ACTION TAKEN: A
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AIR040 40TPA09000413 PM      AIR PROGRAM INFORMATION SYSTEM
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AIR040 40TPA09000413 PM      AIR PROGRAM INFORMATION SYSTEM              10/11/91
                               SOURCE POLLUTANT RECORD                   09:47:44
FACIL: OWN: FLORIDA POWER COR    N/L: NORTH OF CRYSTAL    POLL UPDATED: 10/11/91
     # SRC: 013  MAJOR FAC: Y   CITY: CRYSTAL RIVER     FAC STATUS: A = ACTIVE
SOURC DESC: FOUR COOLING TOWERS FOR UNITS # 1,2, & 3 AT CRYSTAL RIVER
PERMIT/PPS: AC09-162037              MAJOR SRC: .        SRC STATUS: C = CONSTRCT
 NSPS: ...    NESHAP: ...    111D: ...    PSD: 139    NAA/NSR: ...    RACT: ...

              ******     POLLUTANT/CONTROL INFORMATION     ******   PM
POLLUTANT ID: PM  = PARTICULATE MATTER                              % EFF: 99 . 8
PRI: 099 = MISC CONTROL DEVICES            SEC: ___ = ........................
                    *****     EMISSION INFORMATION     *****
   EMISSION FACTOR: 0200 . 200000  UNITS: PPH              REF: 500[2][D]4
POTENTIAL EMISSION: 00202 . 2000  (LB/HR)     000432 . 5000 (TON/YR)
ESTIMATED EMISSION: ______ . ____ (TON/YR)    EST CODE: _ = ....................
   ACTUAL EMISSION: ...... . .... (TON/YR)    AOR CODE: .   AOR YR: ..
ALLOWABLE EMISSION: _____ . ____  (LB/HR)     ______ . ____ (TON/YR)
ALLOWABLE EMISSION: _____ . ______( _____________ ) OTHER UNIT
   REGULATION CODE: ________ = ........................     CEM?: _ (Y OR N)
    TEST FREQUENCY: _ = ..............       FREQUENCY BASE DATE: __ / __ / __
           COMMENT: CONSTRUCTION COMPLETED BY 1993
MORE SOURCE POLLUTANTS ON FILE? YES          ACTION TAKEN: _   TRANSMIT HERE: _
```