



Florida Department of Environmental Regulation

Southeast District • P.O. Box 15425 • West Palm Beach, Florida 33416

Lawton Chiles, Governor

1900 S. Congress Ave., Suite A

Virginia B. Wetherell, Secretary

Telephone: 407/433-2650

Fax: 407/433-2666

JUN 29 1993

RECEIVED

JUL 01 1993

NOTICE OF PERMIT

CERTIFIED MAIL

In the Matter of an Application
for Permit by:

DER File No. AC 06-231760
Broward County

Division of Air
Resources Management

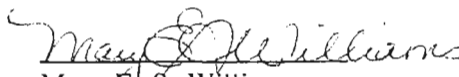
Mr. Jerry O'Hare, President /
Evergreen Technology, Inc. /
1700 E. Las Olas Blvd., Penthouse /
Ft. Lauderdale, FL 33301 /

Enclosed is Permit Number No. AC 06-231760 to construct an air pollution source issued pursuant to Chapter 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit 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; 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 this Notice is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA
DEPARTMENT OF REGULATION

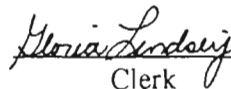

Mary E. S. Williams
Director of District Management

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on JUN 29 1993 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to S.120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 Clerk JUN 29 1993 Date

cc: Broward County Department of Natural Resource Protection
Joe Lurix, DER/WPB
John B. Koogler, Ph.D., P.E.
Bruce Mitchell, DER/ARM, Tallahassee
Town of Davie Town Council



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JUN 29 1993

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 06-231760*

DATE OF ISSUE: JUN 29 1993
EXPIRATION DATE: December 9, 1993

COUNTY: Broward

LATITUDE/LONGITUDE: 26°04'16"N/80°12'19"W

UTM: Zone 17; 579.4 Km. E; 2883.6 Km. N

PROJECT: Evergreen Technology, Inc.
Tire Gasification Demonstration

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-210 and 296, and in conformance with all existing regulations of the Florida Department of Environmental Regulation. 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:

CONSTRUCT: An air pollution source consisting of a tire gasification facility to demonstrate a new technology and provide for a compliance testing program. This demonstration unit will have a capacity of one ton (100 tires maximum) per cycle. The "tire-gas" system uses a dual combustion furnace to gasify discarded tires. The process produces heat (energy) and residue composed of recyclable steel belts and carbon. Emissions are controlled by burning the gaseous products in a conventional gas burner and the flue gases are discharged to the atmosphere. When the testing program has been completed, the gasifier will be disassembled and shipped to its next test location.

IN ACCORDANCE WITH: Request for Modification received June 21, 1993; Application to Construct Air Pollution Sources received November 17, 1992; additional information received December 14, 1992; December 24, 1992, January 19, 1993, February 4, 1993 and Public Notice of Intent issued February 17, 1993 and published February 19, 1993 in the Broward Review (none are attached).

LOCATED AT: 4030 S. State Road 7, Ft. Lauderdale, Broward County, Florida 33314.

TO SERVE: A tire gasification facility (SIC # 4953).

SUBJECT TO: General Conditions 1-14 and Specific Conditions 1-12.

* This permit is a Modification of Permit No. AC 06-221883 issued March 9, 1993.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.
6. The permittee shall 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 and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - (c) Sample or monitor 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 the permit, the permittee shall immediately notify and provide the Department with the following information:
 - (a) A description of and cause of noncompliance; 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. 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 for revocation of this permit.

GENERAL CONDITIONS:

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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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 Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following :

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.
- (b) The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained 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.

14. 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 the 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.

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 06-231760
DATE OF ISSUE: JUN 29 1993
EXPIRATION DATE: December 9, 1993

SPECIFIC CONDITIONS:

1. This technology demonstration may run up to six burn cycles processing 100 tires (maximum) per cycle.
2. Compliance testing shall be conducted for the source covered by this permit in accordance with the frequency and methods specified below.

a. Emission limiting standards are as follow:

- (1) In accordance with Florida Administrative Code Rule 17-296.401(1)(a) -

No visible emission (5 percent opacity) except that visible emissions not exceeding 20 percent opacity are allowed for up to three minutes in any one hour period.

- (2) In accordance with Florida Administrative Code (F.A.C.) Rule 17-296.320 -

- (a) No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

- (b) Objectionable Odor Prohibited - No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

b. Evergreen shall conduct up to six trial burns. The duration of each burn will be nominally eight hours. A complete cycle will include a start-up period of approximately 15-20 minutes, a gasification period of approximately seven hours and a shutdown period of approximately 30 minutes. Emission measurements will consist of three replicate test runs. The first test run will begin during the start-up period and continue for a one-hour period into the gasification cycle. The second and third one-hour test runs will be conducted during the gasification cycle. During the shutdown period, supplemental heat is normally provided by propane resulting in a condition that would produce reduced emissions. Hence, no emission testing is required during the shutdown cycle.

The six test burns shall be identical in the number of tires consumed and the nominal duration of the cycle. During each calibration burn and trial burn, the number of tires consumed shall be recorded as well as the normal unit operating parameters.

c. Test requirements for the first two trial burns are as follow:

Emission measurements shall be conducted at the exhaust stack. The compliance test report shall include results of tests according to the following test protocol.

In general, testing shall be for particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, total hydrocarbons, selected volatile organic compounds and selected metals. All these measurements will be made during one of the test burns and a select number of the measurements will be conducted during the first two trial burns. These measurements are consistent with emissions that would be expected based upon the composition of tires and are consistent with emission measurements that have been conducted during trial burns at other facilities using tire derived fuel. Calibration burns shall not be used for demonstration purposes.

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SPECIFIC CONDITIONS:

The emission measurements to be conducted during the first two trial burns 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. Stack tests and visible emissions testing shall be performed concurrently.

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-hr
Sulfur Dioxide	EPA Method 6C	3*	***	1-hr
Nitrogen Oxides	EPA Method 7E	3*	***	1-hr
Carbon Monoxide	EPA Method 10	3*	***	1-hr
Stack Gas Flow	EPA Method 2	3**	***	1-hr
Stack Gas Moisture	EPA Method 4	3**	***	1-hr
Stack Gas O ₂ /CO ₂	EPA Method 3/3A	3**	***	1-hr

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SPECIFIC CONDITIONS:

- (*) Measurements will be made concurrent with EPA Method 29 tests.
- (**) Measured in conjunction with EPA Method 29 tests.
- (***) These measurements will be determined during the first two demonstration burns.

d. Test requirements for each subsequent trial burn are as follow:

Emission measurements shall be conducted in accordance with the following table. The results of the testing will be analyzed and submitted to the Department in a report that satisfies all requirements of Rule 17-296, F.A.C.

Constituent	Test Method	Location of Test Ports
Visible Emissions	EPA Method 9	Boiler exhaust stack (commencing with each start-up, 1 hr. only)
Total VOCs (controlled)	EPA Method 25A	Boiler exhaust stack
Total VOCs (uncontrolled)	EPA Method 25A	Gasifier exhaust duct
Combustible hydrocarbons	EPA Method 18	Gasifier exhaust duct

Each test for each burn shall consist of three runs. Total VOC (controlled and uncontrolled) and combustible hydrocarbon testing shall be conducted concurrently for each run. Calibration burns shall not be used for demonstration purposes and the Department shall be notified at least five working days prior to any such burns.

All previous gasifier exhaust duct emission testing data shall be submitted, summarized and compared to the data collected pursuant to this specific condition (2.d.).

3. Testing of emissions should be conducted using the fuel and/or process input which are expected to result in the highest emissions and within ten percent (10%) of the rated capacity of the source.
4. The Department shall be notified of expected test dates at least fifteen (15) days prior to the first test burn cycle and five days prior to each subsequent burn cycle.
5. The Technology demonstration operating time covered by this permit shall be limited to 8 hours/day, 5 days/week and cease operation on or before December 9, 1993.

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Evergreen Technology, Inc.
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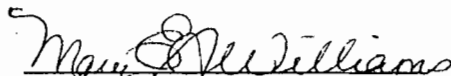
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SPECIFIC CONDITIONS:

6. Auxiliary fuel used shall be limited to propane.
7. Copies of all reports, tests, notifications or other submittals required by this permit shall be submitted to both the Department of Environmental Regulation, Southeast District Office and Broward County Department of Natural Resource Protection.
8. The facility shall keep records of the number of tires received at the site and comply with the Waste Tire General Permit Notification dated November 16, 1992.
9. Performance testing shall immediately cease upon the occurrence of an environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare as verified by the Department or Broward County Department of Natural Resource Protection. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
10. The performance tests shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.
11. The Department shall be notified in writing on the date of the last test run completion.
12. The permittee shall be aware of and operate under the attached "General Permit Condition #1 thru #14". General Permit Conditions are binding upon the permittee and enforceable pursuant to Chapter 403 of the Florida Statutes.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



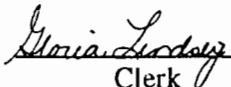
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Director of District Management
P.O. Box 15425
West Palm Beach, FL 33416
407/433-2650

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Clerk

JUN 29 1993
Date



Florida Department of Environmental Regulation

Southeast District • P.O. Box 15425 • West Palm Beach, Florida 33416

Lawton Chiles, Governor

1900 S. Congress Ave., Suite A

Virginia B. Wetherell, Secretary

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Broward County

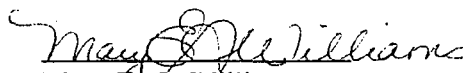
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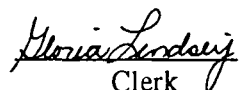

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cc: Broward County Department of Natural Resource Protection
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Bruce Mitchell, DER/ARM, Tallahassee
Town of Davie Town Council

→ p 4/19

Check Sheet

Company Name: *Evergreen Tech, Inc.*
Permit Number: *AC 06-221883, AC 06-231760*
PSD Number:
County: *Broward*
Permit Engineer:
Others involved:

*Both were
*recruited in Southeast
district
This file is more for future
reference.*

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

[Redacted] - *district should have it.*

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

Bruce Mitchell - Tallahassee

RECEIVED

MAR 15 1993

DEPT. OF ENVIRONMENTAL REG.
WEST PALM BEACH

March 15, 1993

MARK SITTIG
DEPARTMENT OF ENVIRONMENTAL REGULATION
1900 SOUTH CONGRESS AVENUE
SUITE A
WEST PALM BEACH, FLORIDA 33406

RE: TEST DATES

DEAR MR. SITTIG

THE FOLLOWING ARE THE PROPOSED DATES OF OPERATION OF OUR TIFE GASIFICATION SYSTEM.

ON MARCH 19TH, 22ND, AND THE 24TH WILL BE OPERATED FOR CALIBRATION PURPOSES.

ON MARCH 26TH, 29TH, AND THE 31ST WILL BE FOR TESTING PURPOSES.

IF THERE IS ANY CHANGE IN THESE DATES WE WILL CONTACT YOUR OFFICE.

THANK YOU FOR YOUR HELP IN OUR PERMITTING PROCESS.

SINCERELY,

JERRY O'HARE
EVERGREEN TECHNOLOGY INC,

CC: O.N.R.P.
CC: CITY OF HOLLYWOOD WATER TREATMENT PLANT

Department of Environmental Regulation
Routing and Transmittal Slip

To: (Name, Office, Location)

1. *Bruce Mitchell - ARM BAR*

2. *Tallahassee TT 310D*

3.

4.

Remarks:

*Evergreen Technology
For your info.*

RECEIVED

MAR 17 1993

Division of Air
Resources Management

From:

Mark Sittig WPB

Date

3/15/93

Phone

J/C 232-2650



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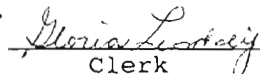

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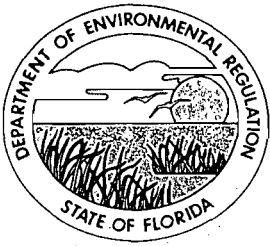
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EXPIRATION DATE: June 1, 1993

COUNTY: Broward

LATITUDE/LONGITUDE: 26°04'16"N/80°12'19"W

UTM: Zone 17; 579.4 Km. E; 2883.6 Km. N

PROJECT: Evergreen Technology, Inc.

Tire Gasification Demonstration

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CONSTRUCT: An air pollution source consisting of a tire gasification facility to demonstrate a new technology and provide for a compliance testing program. This demonstration unit will have a capacity of one ton (100 tires maximum) per cycle. The "tire-gas" system uses a dual combustion furnace to gasify discarded tires. The process produces heat (energy) and residue composed of recyclable steel belts and carbon. Emissions are controlled by burning the gaseous products in a conventional gas burner and the flue gases are discharged to the atmosphere. This unit will be on site for about two months. When the testing program has been completed, the gasifier will be disassembled and shipped to its next test location.

IN ACCORDANCE WITH: Application to Construct Air Pollution Sources received November 17, 1992; additional information received December 14, 1992; December 24, 1992, January 19, 1993, February 4, 1993 and Public Notice of Intent issued February 17, 1993 and published February 19, 1993 in the Broward Review (none are attached).

LOCATED AT: 4030 S. State Road 7, Ft. Lauderdale, Broward County, Florida 33314.

TO SERVE: A tire gasification facility (SIC # 4953).

SUBJECT TO: General Conditions 1-14 and Specific Conditions 1-12.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.

6. The permittee shall 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 and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under the conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor 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 the permit, the permittee shall immediately notify and provide the Department with the following information:

- (a) A description of and cause of noncompliance; 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. 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 for revocation of this permit.

GENERAL CONDITIONS:

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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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 Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following :

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

(b) The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit.

These materials shall be retained 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.

14. 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 the 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.

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: 06-221883
DATE OF ISSUE: MAR - 3 1993
EXPIRATION DATE: June 1; 1993

SPECIFIC CONDITIONS:

1. This technology demonstration may run up to six burn cycles processing 100 tires (maximum) per cycle.

2. Compliance testing shall be conducted for the source covered by this permit in accordance with the frequency and methods specified below.

a. Emission limiting standards are as follow:

(1) In accordance with Florida Administrative Code Rule 17-296.401(1)(a)-

No visible emission (5 percent opacity) except that visible emissions not exceeding 20 percent opacity are allowed for up to three minutes in any one hour period.

(2) In accordance with Florida Administrative Code (F.A.C.) Rule 17-296.320-

(a) No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

(b) Objectionable Odor Prohibited - No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

b. Emission measurements shall be conducted at the exhaust stack. The compliance test report shall include results of tests according to the following test protocol.

In general, testing shall be for particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, total hydrocarbons, selected volatile organic compounds and selected metals. All these measurements will be made during one of the test burns and a select number of the measurements will be conducted during all test burns. These measurements are consistent with emissions that would be expected based upon the composition of tires and are consistent with emission measurements that have been conducted during trial burns at other facilities using tire derived fuel. Calibration burns shall not be used for demonstration purposes.

Evergreen shall conduct up to six trial burns. The duration of each burn will be nominally eight hours. A complete cycle will include a start-up period of approximately 15-20 minutes, a gasification period of approximately seven hours and a shutdown period of approximately 30 minutes. Emission measurements will consist of three replicate test runs. The first test run will begin during the start-up period and continue for a one-hour period into the gasification cycle. The second and third one-hour test runs will be conducted during the gasification cycle. During the shutdown period, supplemental heat is normally provided by propane resulting in a condition that would produce reduced emissions. Hence, no emission testing is required during the shutdown cycle.

The six test burns shall be identical in the number of tires consumed and the nominal duration of the cycle. During each calibration burn and trial burn, the number of tires consumed shall be recorded as well as the normal unit operating parameters.

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

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.

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

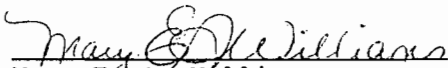
I.D. NUMBER: 50/BRO/06/2159
PERMIT/CERTIFICATION NUMBER: AC106-221883
DATE OF ISSUE: MAR - 9 1993
EXPIRATION DATE: June 1, 1993

SPECIFIC CONDITIONS:

3. Testing of emissions should be conducted using the fuel and/or process input which are expected to result in the highest emissions and within ten percent (10%) of the rated capacity of the source.
4. The Department shall be notified of expected test dates at least fifteen (15) days prior to the first test burn cycle and one day prior to each subsequent burn cycle.
5. The Technology demonstration operating time covered by this permit shall be limited to 8 hours/day, 5 days/week and cease operation on June 1, 1993.
6. Auxiliary fuel used shall be limited to propane.
7. Copies of all reports, tests, notifications or other submittals required by this permit shall be submitted to both the Department of Environmental Regulation, Southeast District Office and Broward County Department of Natural Resource Protection.
8. The facility shall keep records of the number of tires received at the site and comply with the Waste Tire General Permit Notification dated November 16, 1992.
9. Performance testing shall immediately cease upon the occurrence of an environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare as verified by the Department or Broward County Department of Natural Resource Protection. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
10. The performance tests shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.
11. The Department shall be notified in writing on the date of the last test run completion.
12. The permittee shall be aware of and operate under the attached "General Permit Condition #1 thru #14". General Permit Conditions are binding upon the permittee and enforceable pursuant to Chapter 403 of the Florida Statutes.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

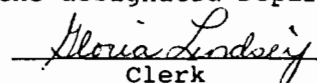

Mary E. S. Williams
Director of District Management
P.O. Box 15425
West Palm Beach, FL 33416
407/433-2650

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on MAR 9 1993 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to S.120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk MAR - 9 1993
Date

3-16-93 @ 12:50
Sook @ Merck - told
him about cog for request/ing
on used oil - must submit mod,
② change protocol/parameters
③ Public Notice
BR

3-10-93
@ 12:59

Ft. Lauderdale

Broward Co.

Evergreen Test Proposal
Trial Test Burns
3-26
12:29

To Bruce Mitchell

Date 3/10 Time 11:21

WHILE YOU WERE OUT

M Mark Sittig

of _____

Phone 50232-2650
Area Code Number Extension

<input type="checkbox"/>	TELEPHONED	<input type="checkbox"/>	PLEASE CALL
<input type="checkbox"/>	CALLED TO SEE YOU	<input type="checkbox"/>	WILL CALL AGAIN
<input type="checkbox"/>	WANTS TO SEE YOU	<input type="checkbox"/>	URGENT
<input type="checkbox"/>	RETURNED YOUR CALL		

Message _____

_____ 9

_____ 6

Operator: _____

FEB 17 1993

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE PERMIT

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

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

DER File No. AC 06-221883
Broward County

The Department of Environmental Regulation gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Mr. Jerry O'Hare, President of Evergreen Technology, Inc., 1700 E. Las Olas Blvd., Penthouse, Ft. Lauderdale, Florida 33301, applied on November 17, 1992 to the Department of Environmental Regulation for a permit to construct an air pollution source consisting of a tire gasification facility to demonstrate a new technology and provide for a compliance testing program. This demonstration unit will have a capacity of one ton (100 tires maximum) per cycle. The "tire-gas" system uses a dual combustion furnace to gasify discarded tires. The process produces heat (energy) and residue composed of recyclable steel belts and carbon. Emissions are controlled by burning the gaseous products in a conventional gas burner and the flue gases are discharged to the atmosphere. This unit will be on site for about two months. When the testing program has been completed, the gasifier will be disassembled and shipped to its next test location. This facility will be located at 4030 South State Road 7, Ft. Lauderdale, Broward County, Florida.

The Department has permitting jurisdiction under Florida Statutes 403.087, to issue or deny permits for air pollution sources. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

The Department intends to issue this permit based on Florida Administrative Code Rules 17-296 and 17-4, and the belief reasonable assurances have been provided to indicate the proposed project will not adversely impact air quality.

Pursuant to Section 403.815, Florida Statutes 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department, at 1900 South Congress Avenue, Suite A, West Palm Beach, Florida, 33416, 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 permit.

The Department will issue the permit 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, within 14 days of publication of this notice. 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.

Mr. Jerry O'Hare, President
Evergreen Technology, Inc.
Ft. Lauderdale, Florida 33301


DER Permit No. AC 06-221883

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 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 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 28-5.207, F.A.C.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Mary E. S. Williams
Director of District Management
P.O. Box 15425
West Palm Beach, FL 33416
407/433-2650

RECEIVED

FEB 22 1993

Division of Air
Resources Management

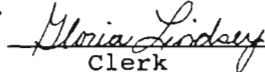
MESW:ms:gml/10

CERTIFICATE OF SERVICE

This is to certify that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on FEB 17 1993 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to S.120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk

FEB 17 1993
Date

Copies furnished to: Broward County Department of Natural Resource Protection
Joe Lurix, DER/WPB
John B. Koogler, Ph.D., P.E.
Bruce Mitchell, DER/ARM/Tallahassee
Prakash Lodha, P.E.
Town of Davie Town Council

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE PERMIT

The Department of Environmental Regulation gives notice of its intent to issue a permit to Mr. Jerry O'Hare, President of Evergreen Technology, Inc, 1700 E. Las Olas Blvd., Penthouse, Ft. Lauderdale, Florida 33301 to construct an air pollution source consisting of a tire gasification facility to demonstrate a new technology and provide for a compliance testing program. This demonstration unit will have a capacity of one ton (100 tires maximum) per cycle. The "tire-gas" system uses a dual combustion furnace to gasify discarded tires. The process produces heat (energy) and residue composed of recyclable steel belts and carbon. Emissions are controlled by burning the gaseous products in a conventional gas burner and the flue gases are discharged to the atmosphere. This unit will be on site for about two months. When the testing program has been completed, the gasifier will be disassembled and shipped to its next test location. This source is not expected to violate air pollution regulations. This facility will be located at 4030 South State Road 7, Ft. Lauderdale, Broward County, Florida.

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 14 days of publication of this notice. 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 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 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 28-5.207, 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 the Southeast Florida District Office, 1900 South Congress Avenue, Suite A, West Palm Beach, Florida 33416.



Florida Department of Environmental Regulation

Southeast District • P.O. Box 15425 • West Palm Beach, Florida 33416

Lawton Chiles, Governor

1900 S. Congress Ave., Suite A
Telephone: 407/433-2650
Fax: 407/433-2666

Virginia B. Wetherell, Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

DRAFT

CERTIFIED MAIL

In the Matter of an Application
for Permit by:

DER File No. AC 06-221883
Broward County

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

Enclosed is Permit Number No. AC 06-221883 to construct an air pollution source issued pursuant to Chapter 403.087, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit 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; 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 this Notice is filed with the Clerk of the Department.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA
DEPARTMENT OF REGULATION

Mary E. S. Williams
Director of District Management
P.O. Box 15425
West Palm Beach, FL 33416
407/433-2650

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on _____ to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to S.120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date

MESW:ms:gml/12

cc: Prokash Lodha, P.E.
Broward County Department of Natural Resource Protection
Joe Lurix, DER/WPB
John B. Koogler, Ph.D., P.E.
Bruce Mitchell, DER/ARM, Tallahassee
Town of Davie Town Council

DRAFT

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:
EXPIRATION DATE: June 1, 1993
COUNTY: Broward
LATITUDE/LONGITUDE: 26°04'16"N/80°12'19"W
UTM: Zone 17; 579.4 Km. E; 2883.6 Km. N
PROJECT: Evergreen Technology, Inc.
Tire Gasification Demonstration

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule 17-210 and 296, and in conformance with all existing regulations of the Florida Department of Environmental Regulation. 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:

CONSTRUCT: An air pollution source consisting of a tire gasification facility to demonstrate a new technology and provide for a compliance testing program. This demonstration unit will have a capacity of one ton (100 tires maximum) per cycle. The "tire-gas" system uses a dual combustion furnace to gasify discarded tires. The process produces heat (energy) and residue composed of recyclable steel belts and carbon. Emissions are controlled by burning the gaseous products in a conventional gas burner and the flue gases are discharged to the atmosphere. This unit will be on site for about two months. When the testing program has been completed, the gasifier will be disassembled and shipped to its next test location.

IN ACCORDANCE WITH: Application to Construct Air Pollution Sources received November 17, 1992; additional information received December 14, 1992; December 24, 1992, January 19, 1993, February 4, 1993 and Public Notice of Intent issued _____, 1993 and published _____, 1993 in the _____ (none are attached).

LOCATED AT: 4030 S. State Road 7, Ft. Lauderdale, Broward County, Florida 33314.

TO SERVE: A tire gasification facility (SIC # 4953).

SUBJECT TO: General Conditions 1-14 and Specific Conditions 1-12.

DRAFT

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither 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 is not 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, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; 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.

6. The permittee shall 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 and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under the conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor 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 the permit, the permittee shall immediately notify and provide the Department with the following information:

(a) A description of and cause of noncompliance; 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. 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 for revocation of this permit.

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GENERAL CONDITIONS:

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 involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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 Rule 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following :

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the Department.

(b) The permittee shall hold 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) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit.

These materials shall be retained 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.

14. 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 the 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.

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SPECIFIC CONDITIONS:

1. This technology demonstration may run up to six burn cycles processing 100 tires (maximum) per cycle.

2. Compliance testing shall be conducted for the source covered by this permit in accordance with the frequency and methods specified below.

a. Emission limiting standards are as follow:

(1) In accordance with Florida Administrative Code Rule 17-296.401(1)(a)-

No visible emission (5 percent opacity) except that visible emissions not exceeding 20 percent opacity are allowed for up to three minutes in any one hour period.

(2) In accordance with Florida Administrative Code (F.A.C.) Rule 17-296.320-

(a) No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

(b) Objectionable Odor Prohibited - No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

b. Emission measurements shall be conducted at the exhaust stack. The compliance test report shall include results of tests according to the following test protocol.

In general, testing shall be for particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, total hydrocarbons, selected volatile organic compounds and selected metals. All these measurements will be made during one of the test burns and a select number of the measurements will be conducted during all test burns. These measurements are consistent with emissions that would be expected based upon the composition of tires and are consistent with emission measurements that have been conducted during trial burns at other facilities using tire derived fuel. Calibration burns shall not be used for demonstration purposes.

Evergreen shall conduct up to six trial burns. The duration of each burn will be nominally eight hours. A complete cycle will include a start-up period of approximately 15-20 minutes, a gasification period of approximately seven hours and a shutdown period of approximately 30 minutes. Emission measurements will consist of three replicate test runs. The first test run will begin during the start-up period and continue for a one-hour period into the gasification cycle. The second and third one-hour test runs will be conducted during the gasification cycle. During the shutdown period, supplemental heat is normally provided by propane resulting in a condition that would produce reduced emissions. Hence, no emission testing is required during the shutdown cycle.

The six test burns shall be identical in the number of tires consumed and the nominal duration of the cycle. During each calibration burn and trial burn, the number of tires consumed shall be recorded as well as the normal unit operating parameters.

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:
 EXPIRATION DATE: June 1, 1993

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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.

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:
EXPIRATION DATE: June 1, 1993

DRAFT

SPECIFIC CONDITIONS:

3. Testing of emissions should be conducted using the fuel and/or process input which are expected to result in the highest emissions and within ten percent (10%) of the rated capacity of the source.
4. The Department shall be notified of expected test dates at least fifteen (15) days prior to the first test burn cycle and one day prior to each subsequent burn cycle.
5. The Technology demonstration operating time covered by this permit shall be limited to 8 hours/day, 5 days/week and cease operation on June 1, 1993.
6. Auxiliary fuel used shall be limited to propane.
7. Copies of all reports, tests, notifications or other submittals required by this permit shall be submitted to both the Department of Environmental Regulation, Southeast District Office and Broward County Department of Natural Resource Protection.
8. The facility shall keep records of the number of tires received at the site and comply with the Waste Tire General Permit Notification dated November 16, 1992.
9. Performance testing shall immediately cease upon the occurrence of an environmental complaint by a citizen or other party, or a nuisance or danger to public health or welfare as verified by the Department or Broward County Department of Natural Resource Protection. Performance testing shall not resume until appropriate measures to correct the problem have been implemented.
10. The performance tests shall be conducted under the direct supervision and responsible charge of a professional engineer registered in Florida.
11. The Department shall be notified in writing on the date of the last test run completion.
12. The permittee shall be aware of and operate under the attached "General Permit Condition #1 thru #14". General Permit Conditions are binding upon the permittee and enforceable pursuant to Chapter 403 of the Florida Statutes.

Executed in West Palm Beach, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Mary E. S. Williams
Director of District Management
P.O. Box 15425
West Palm Beach, FL 33416
407/433-2650

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on _____ to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to S.120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
904/377-5822 • FAX 377-7158

KA 540-93-01

February 4, 1993

RECEIVED

FEB 05 1993

Division of Air
Resources Management

VIA FAX

Mr. Bruce Mitchell
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Evergreen Technology, Inc.
Proposed Test Protocol

Dear Mr. Mitchell:

In accordance with our telephone conversations of February 3 and 4, 1993, I am proposing that the following emission measurements be conducted at the Evergreen Technology, Inc. (Evergreen) tire gasification facility when the unit is operated for test purposes. In general, testing is proposed for particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, total hydrocarbons, selected volatile organic compounds and selected metals. These measurements will be made during one of the test burns and are consistent with emissions that would be expected based upon the composition of tires and are consistent with emission measurements that have been conducted during trial burns at other facilities using tire derived fuel.

Evergreen is proposing to conduct up to six trial burns. The duration of each burn will be nominally eight hours. A complete cycle will include a start-up period of approximately 15-20 minutes, a gasification period of approximately seven hours and a shutdown period of approximately 30 minutes. The emission measurements will consist of three replicate test runs during one of the test burns. The first test run will begin during the start-up period and continue for a one-hour period into the gasification cycle. The second and third one-hour test runs will be conducted during the gasification cycle. During the shutdown period, supplemental heat is normally provided by propane resulting in a condition that would produce reduced emissions. Hence, no emission testing is proposed during the shutdown cycle.

2-18-93

All correspondence
sent to Mark Sittig
on 2-4-93.

Boer

Mr. Bruce Mitchell
Florida Department of
Environmental Regulation

February 4, 1993
Page 2

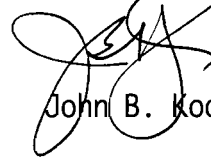
The six test burns proposed by Evergreen will be identical in the number of tires consumed and the nominal duration of the cycle. During each of the trial burns, the number of tires consumed will be recorded as well as the normal unit operating parameters.

The emission measurements that will be conducted are summarized in the attached table. This summary includes the parameters that will be measured, the test method that will be used, the number of test runs and the duration of each test 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.

I trust that the protocol proposed herein reasonably represents the protocol that we agreed upon during our discussions on February 3 and 4, 1993. If there are any questions or comments regarding this protocol, please do not hesitate to contact me.

Very truly yours,

KOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.

JBK:wa
Enc.

c: Mr. Mark Sittig, FDER, West Palm Beach
Mr. Jerry O'Hare, Evergreen
Ms. Sheila Harrigan, Evergreen



PROPOSED EMISSION MEASUREMENT PROTOCOL
 EVERGREEN TECHNOLOGY, INC.
 TIRE GASIFICATION FACILITY
 FT. LAUDERDALE, FLORIDA

Constituent	Test Method	Number of Test Runs	Duration of Each Test Run
Particulate Matter	Front half of EPA Method 29 (Multi-metals Train)	3	1-hr
Visible Emissions	EPA Method 9	3	1-hr
Metals	EPA Method 29 (Multi-metals Train)	3	1-hr
Chromium			
Lead			
Zinc			
Nickel			
Aluminum			
Cadmium			
Volatile Organics	VOST (SW846-0030)	3	30-mins
Benzene			
Toluene			
Xylene			
Ethylbenzene			
Total VOCs	EPA Method 25A	3(1)	1-hr
Sulfur Dioxide	EPA Method 6C	3(1)	1-hr
Nitrogen Oxides	EPA Method 7E	3(1)	1-hr
Carbon Monoxide	EPA Method 10	3(1)	1-hr
Stack Gas Flow	EPA Method 2	3(2)	1-hr
Stack Gas Moisture	EPA Method 4	3(2)	1-hr
Stack Gas O ₂ /CO ₂	EPA Method 3/3A	3(2)	1-hr

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

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

