

Memorandum

Florida Department of
Environmental Protection

TO: Howard L. Rhodes
FROM: C. H. Fancy *CHF*
DATE: August 10, 1993
SUBJ: Permit to Operate
D.R.E. Environmental, Inc.

Attached for your approval and signature is a permit to operate a mobile soil thermal treatment facility. The facility is authorized to operate in every District.

I recommend your approval and signature.

CHF/WH/bjb

Attachments

2/9
[Signature]
Disseminated
10/10/93

NOTICE OF PERMIT ISSUANCE
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an Application
for Permit by:

DER File No. AO16-231440
Mobile Operation

Mr. Chris K. Sleeper, President
D.R.E. Environmental, Inc.
P. O. Box 1386
Lake City, Florida 32056-1386

Enclosed is permit number AO 16-231440 for a 35 TPH mobile soil thermal treatment facility that is allowed to operate throughout Florida except in Okaloosa and Hernando counties. This permit is being issued pursuant to Section(s) 403, Florida Statutes, and Florida Administrative Code Chapters 17-210 and 17-4.

A person whose substantial interests are affected by this permit 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 receipt of this Permit. 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 permit. 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 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.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on 8-10-93 to the listed persons.

Clerk Stamp

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

 8-10-93
(Clerk) (Date)

Copies furnished to:
District Air Program Administrators
County Air Program Administrators

Permit to Operate
Evaluation

D.R.E. Environmental, Inc.
P.O. Box 1386
Lake City, FL 32056-1386

35 TPH Mobile Soil Thermal Treatment Facility
Statewide Operation
(Except Okaloosa and Hernando Counties)

Unit No. 1
AO16-231440

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

August 4, 1993

Permit to Operate Evaluation

On May 18, 1993, D.R.E. Environmental, Inc. submitted an application for a permit to operate a 35 tons per hour (TPH) mobile soil thermal treatment facility throughout Florida except for Okaloosa and Hernando counties.

The construction permit allowed the facility to process up to 35 TPH of soils contaminated with petroleum products, emit 0.08 grains (gr) per dry standard cubic foot (dscf) at 50 percent excess air (EA) (based on the policy on soil thermal treatment facilities that was being followed when the application for permit to construct this facility was processed) and 7.4 pounds per hour (lbs/hr) particulate matter (PM), 8.6 lbs/hr benzene, and 22.1 lbs/hr volatile organic compounds (VOC). Since issuing this construction permit on May 10, 1991, the Department has amended its air pollution control regulations to incorporate specific requirements for soil thermal treatment facilities (F.A.C. Rule 17-296.415). These regulations require soil thermal treatment facilities to meet a PM emission standard of 0.04 gr/dscf, give a minimum temperature/residence time for the afterburner, and limit emissions from the afterburner to 5 percent opacity and 100 parts per million (ppm) carbon monoxide (CO).

The compliance test reports show that this facility has complied with these emission limits at a process rate of 20 TPH. The Department will issue an operating permit for this facility that will incorporate the requirements of F.A.C. Rule 17-296.415. The permit will also require the unit be retested when it operates at a process rate above 22 TPH (10 percent above the process rate for which compliance was demonstrated) to confirm that it is complying with the regulations at the higher process rate and that the carbon monoxide (CO) continuous emissions monitor be upgraded prior to the expiration of the permit.



Florida Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

| | |
|------------------------------|---|
| PERMITTEE: | Permit Number: AO16-231440 |
| D. R. E. Environmental, Inc. | Expiration Date: July 15, 1998 |
| P. O. Box 1386 | County: Mobile Operation |
| Lake City, Florida 32056 | Project: 35 TPH Mobile Soil Thermal Treatment Facility |

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-212 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Authorization to operate a 35 TPH mobile soil thermal treatment facility. The facility consists of a 15 ton bin to receive contaminated soil, a 24" belt conveyer for transferring up to 35 TPH of wet petroleum contaminated soil to the kiln, a rotary kiln (5 feet diameter by 28 feet long), a Hauck BH390-8 baghouse, a Hauck afterburner operating above 1600 °F and 1 second residence time, two propane, natural gas or No. 2 fuel oil burners (23 MMBtu/hr for the kiln and 22 MMBtu/hr for the afterburner), a 200 KW diesel powered generator, instruments to measure and record the process feed rate to the kiln, the pressure drop across the baghouse, the temperature of the afterburner, the CO concentration of the flue gas leaving the afterburner, and associated controls. The facility is equipped with a stack (3 feet diameter by 30 feet high) that discharges over 36,100 acfm at 1600 °F to the atmosphere.

The facility may be used throughout the State (all counties) except that the facility shall not be operated in Okaloosa and Hernando counties or within one mile of the boundary of Hernando County.

The facility shall be constructed and operated in accordance with the permit applications, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Certificate of Completion received May 18, 1993.

PERMITTEE:
D.R.E. Environmental, Inc.
P. O. Box 1386
Lake City, Florida 32056

Permit Number: AO16-231440
Expiration Date: July 15, 1998

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 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. 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), Florida Statutes, 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 acknowledgment 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.

PERMITTEE:
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Lake City, Florida 32056

Permit Number: AO16-231440
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GENERAL CONDITIONS:

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 a reasonable time, 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 this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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.

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 403.73 and 403.111, Florida Statutes. 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.

PERMITTEE:
D.R.E. Environmental, Inc.
P. O. Box 1386
Lake City, Florida 32056

Permit Number: AO16-231440
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GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit 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 dates 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 that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

PERMITTEE:
D.R.E. Environmental, Inc.
P. O. Box 1386
Lake City, Florida 32056

Permit Number: AO16-231440
Expiration Date: July 15, 1998

SPECIFIC CONDITIONS:

PLANT OPERATION PARAMETERS

1. The facility shall only treat petroleum contaminated soil as defined in F.A.C. Rule 17-775, (F.A.C. Rule 17-296.415).
2. Hazardous waste as defined in 40 CFR 261.3 shall not be processed by this facility (F.A.C. Rule 17-775).
3. This facility shall not treat polychlorinated biphenyls (PCBs) contaminated soil (F.A.C. Rule 17-775).
4. Based on data in the application, the input of petroleum contaminates as total recoverable petroleum hydrocarbons (TRPH) in the soil into the facility shall not exceed 1400 lbs/hr (daily avg.).
5. To avoid exceeding the Acceptable Ambient Air Concentration (AAC), the average daily concentration of benzene in the soil treated by this facility shall not exceed 7,776 parts per million (ppm).
6. The afterburner shall be operated above 1600 °F with at least a 1 second retention time (F.A.C. Rule 17-296.415).
7. The facility may operate continuously, 8760 hours per year. It shall not be operated at a site with another soil thermal treatment facility (combined emissions may make a major facility and the impact of the emissions may exceed the AAC).
8. The maximum contaminated soil charging rate to this facility shall be 35 tons per hour (TPH). The facility shall have a calibrated belt scale to monitor the charging rate to the kiln. The permittee shall demonstrate compliance with the particulate matter (PM) and visible emission standard of this permit within 45 day of initial operation at a rate above 22 TPH (compliance has not been demonstrated above this process rate).
9. Soil entering the kiln cannot be larger than 2 inches in diameter (F.A.C. Rule 17-775).
10. As proposed by the permittee, only natural gas, propane, or No. 2 fuel oil containing a maximum of 0.3% sulfur (annual average) shall be used as fuel for the kiln and afterburner. The maximum permitted fuel consumption, equivalent to 45 million British thermal units per hour (MMBtu/hr) heat input, is 45,000 cubic feet per hour (CFH) natural gas, 500 gallons per hour (GPH) propane, or 330 GPH No. 2 fuel oil. The electrical generator is allowed to burn 13.2 GPH diesel fuel (1.8 MMBtu/hr).

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SPECIFIC CONDITIONS

EMISSION LIMITS

11. Particulate matter emissions from the afterburner stack shall neither exceed 0.04 grains (gr) per dry standard cubic foot (dscf), 7.4 pounds per hour (lbs/hr), nor 32.4 TPY (F.A.C. Rule 17-296.415(2)(b)).
12. Visible emissions from the facility stack shall not exceed 5 percent opacity (F.A.C. Rule 17-296.415(2)(a)).
13. Carbon monoxide emissions shall not exceed 100 parts per million by volume, dry, during any 60 consecutive minute period (F.A.C. Rule 17-296.415(1)(b)).
14. The operation of this facility shall not result in the emissions of air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-296.320).
15. Untreated soil removed from the ground shall be stored under waterproof covers to minimize unconfined emissions of petroleum products (F.A.C. Rule 17-296.310).
16. Reasonable precautions shall be used to minimize unconfined emissions of particulate matter generated by the operation (F.A.C. Rule 17-296.310). Reasonable precautions shall be defined as keeping the work areas wet where the soil is being removed, treated, handled, and stored or disposed of.

GENERAL REQUIREMENTS

17. The system shall be properly operated and maintained (F.A.C. Rule 17-210.300). No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly (F.A.C. Rule 17-210.650). The permittee's operation of the soil thermal treatment facility in Florida is conditioned upon the baghouse, the cyclones, and the afterburner of the facility being fully operational, as demonstrated by monitoring instrumentation on the baghouse and afterburner.
18. The unit shall not be operated at a location or in a manner that may create a nuisance. The unit shall not operate in Okaloosa or Hernando counties or within one mile of the boundaries of Hernando County (Settlement Stipulation, Case No. 90-941). The permittee shall comply with all applicable county, municipal, federal or other state regulations, which may include obtaining a county permit, prior to operating at a site (F.A.C. Rule 17-4.070(7)).

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SPECIFIC CONDITIONS

EMISSION TESTING REQUIREMENTS

19. This facility shall be tested (EPA test methods are specified in 40 CFR 60, Appendix A, revised July 1, 1990) at 90 - 100 percent of its permitted process rate for visible emissions during startup at each new site it is operated at and annually for:

- (A) Particulate matter (PM) emissions by EPA Methods 1, 2, 3, 4, and 5.
- (B) Visible emissions by EPA Method 9.
- (C) Carbon monoxide (CO) emissions by averaging each hour of the readings from the CO continuous emission monitor during the PM test period.
- (D) Afterburner temperature by averaging each hour of the temperature readings from the continuous temperature monitor during the PM test.
- (E) Afterburner residence time using the test data collected by EPA Methods 1 and 2.
- (F) Fuel oil sulfur limits based on analysis referenced in 40 CFR 60.17 or other methods after Department approval. A certified analysis by the fuel oil supplier will be acceptable.
- (G) Contaminated soil analysis for volatile organic aromatics (VOA), total recoverable petroleum hydrocarbons (TRPH), polynuclear aromatic hydrocarbons (PAH), volatile organic halocarbons (VOH), and metals as required by F.A.C. Rule 17-775 of the soil being treated during the particulate matter compliance test.

20. This facility must be tested for particulate matter and visible emissions within 30 days of exceeding a process input rate of 22 TPH. All compliance tests shall meet the requirements listed in F.A.C. Rule 17-297. The facility shall not operate above the maximum permitted process rate of 35 TPH.

21. When the Department, after investigation, has good reason (such as complaints, increased visible emissions, or questionable maintenance of control equipment) to believe that any applicable emission standard contained in F.A.C. Rule 17-296.415 or in this permit is being violated, it may require the owner or operator of the unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the Department (F.A.C. Rule 17-297.340(2)).

PERMITTEE:
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SPECIFIC CONDITIONS

RECORD KEEPING REQUIREMENTS

22. Pressure drop across the baghouse, temperature of the afterburner, and CO emissions shall be recorded continuously during operations. The CO continuous emission monitor shall be replaced with one having a span of approximately 0 to 200 ppm CO prior to the expiration of this permit. The instruments used to obtain these measurements shall be properly calibrated, maintained, and in operation any time the facility is in service.

23. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements, all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, adjustments and maintenance performed on these systems or devices, all soil analysis required by F.A.C. Rule 17-775 and all other information required by rules and this permit, recorded in a permanent form suitable for inspection. The file shall be retained for at least 3 years following the date of such measurements, maintenance, reports, and records.

24. The permittee shall maintain a daily log that shows the date, location, operation time, pressure drop across the PM control device, processing rate, type and quantity of fuel consumption in the dryer and afterburner, and any operation problems. These records shall be maintained for a minimum of 3 years.

ADMINISTRATIVE REQUIREMENTS

25. The Bureau of Air Regulation (BAR) shall be notified in writing at least 15 days in advance of any scheduled compliance test to be conducted on this facility (F.A.C. Rule 17-297.340(1)(i)).

26. Compliance test results shall be submitted to the BAR and the District that the tests were conducted in within 45 days of the test (F.A.C. Rule 17-297.570(2)).

27. The permittee for a mobile unit shall notify the BAR, local government (city and/or county) and the Department District office by registered mail at least 5 days prior to moving to a new operating site. The notification shall provide the permit number of the facility, a copy of the last stack test results, the date of the proposed move, the new work site address for the facility, the amount of contaminated soil at the new site, and the locations and contamination levels of the soils to be treated. The Department will notify the permittee of any new restrictions for the facility that will apply while it is operating at the new site (F.A.C. Rule 17-775.700(1)).

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SPECIFIC CONDITIONS

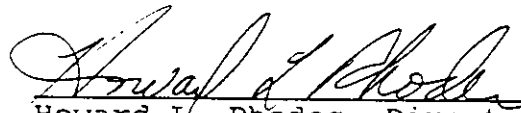
28. The permittee shall submit to the BAR each calendar year, on or before March 1, an Annual Operation Report DER Form 17-1.202(c) for this facility for the preceding calendar year containing at least the following information pursuant to Subsection 403.061(13), F.S.:

- (A) Annual amount of material and/or fuels utilized.
- (B) Annual emissions in TPY (note calculation basis).
- (C) Annual hours of operation.
- (D) Any changes in the information contained in the application.
- (E) All compliance tests reports for the preceding year.
- (F) Temperature and CO exceedance reports for the year.

29. An application for an operating permit must be submitted to the BAR at least 90 days prior to the expiration date of this permit. To apply for an operation permit, the applicant shall submit the appropriate application form, fee, a report on any physical change or major maintenance to the facility, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this 9 day
of August, 1993

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Howard L. Rhodes, Director
Division of Air Resources
Management