



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

**Permit Number:** AC 16-189522A  
**Expiration Date:** January 1, 1995  
**County:** Mobile Operation  
**Project:** 35 TPH Mobile Soil  
Remediation Unit No. 2

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 drawing(s), plans, and other documents attached hereto and specifically described as follows:

Authorization to construct a 35 TPH mobile soil remediation unit. The unit consists of a 15 ton bin to receive the contaminated soil, a 24 inch wide belt conveyor for transferring up to 35 tons per hour (TPH) of wet soil to the kiln, a rotary kiln (5 feet diameter by 28 feet long), a Hauck BH390-8 baghouse, a 98.42% efficient (minimum) Hauck afterburner capable of operating above 1600°F with a 1 second residence time, two propane or natural gas burners (23 MMBtu/hr for kiln and 22 MMBtu/hr for afterburner), a 200 KW generator, instruments to measure and record the feed rate to the kiln, the pressure drop across the baghouse, the temperature of the afterburner, and associated controls. The unit is equipped with a stack (3 feet diameter by 30 feet high) that discharges approximately 36,077 acfm at 1600°F to the atmosphere.

The unit may be used throughout the State (all counties) after receiving Department authorization to operate at a new location, except that the unit shall not be operated in Okaloosa and Hernando counties or within one mile of the the boundry of Hernando County.

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

Attachments are listed below:

1. Application received Oct. 9, 1990.
2. DER letter dated Oct. 24, 1990.
3. D.R.E. letter dated Oct. 5, 1990.
4. D.R.E. letter dated Nov. 28, 1990.
5. D.R.E. letter dated February 26, 1991.
6. Settlement Stipulation (Herb Shapiro, John H. Austin, and Hernando County).

7. Stipulation and Settlement Agreement Between John N. Austin, Susanne S. Trogdon, and D.R.E. Environmental, Inc.
8. D.R.E. letter dated March 19, 1991.
9. Bay County letter dated February 18, 1991.
10. Final Order (DOAH Case No. 91-0941 and 1020).
11. D.R.E. letter dated September 1, 1993.

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**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 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.

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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.

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10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, 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.

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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.

**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 Total Recoverable Petroleum Hydrocarbons (TRPH) in the soil into the facility shall not exceed 1400 lbs/hr (daily avg.). Daily average is the pounds of TRPH in the untreated soil processed during a calendar day divided by the facility's actual hours of operation during that day.
5. For determining applicability of Title V, the benzene content of the untreated soil is limited to 3260 ppm. This is equivalent to 2.28 lb/hr and 10 TPY benzene emissions.
6. The afterburner shall be operated above 1600 °F with a 1 second retention time (F.A.C. Rule 17-296.415).
7. The facility may operate continuously, 8760 hrs/yr. It shall not be operated at a site with another soil thermal treatment facility (combined emissions may make a major facility subject to Title V and other regulations and the impact of the emissions may exceed the AAC).
8. The maximum contaminated soil charging rate to this facility shall be 35 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 in Florida.
9. Soil entering the kiln cannot be larger than 2 inches in diameter (F.A.C. Rule 17-775).

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#### SPECIFIC CONDITIONS:

10. As proposed by the permittee, only natural gas, propane, or No. 2 fuel oil containing a maximum of 0.3% sulfur shall be used as fuel for the kiln and afterburner. The maximum permitted fuel consumption, equivalent to 45 MMBtu/hr heat input, is 45,000 CFH natural gas, 500 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).

#### EMISSION LIMITS

11. Particulate matter emissions from the afterburner stack shall neither exceed 0.04 grains/dscf, 7.4 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 (Rule 17-296.415(1)(b), F.A.C.).

14. The operation of this facility shall not result in the emissions of air pollutants which cause or contribute to an objectionable odor pursuant to 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 and the afterburner of the facility being fully operational, as demonstrated by monitoring instrumentation on the baghouse and afterburner.

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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).

**EMISSION TESTING REQUIREMENTS**

19. This facility shall be tested (EPA test methods are specified in 40 CFR 50, Appendix A, revised July 1, 1993) 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 period.
- (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 Rule 17-775.410, F.A.C., 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 operation in Florida. 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.



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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)).

#### RECORD KEEPING REQUIREMENTS

22. Pressure drop across the baghouse, temperature of the afterburner, and CO emissions shall be recorded continuously during operations. 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) and the District with jurisdiction over the contaminated site 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

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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 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)).

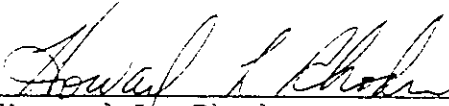
28. The permittee shall submit to the BAR each calendar year, on or before March 1, an Annual Operation Report DER Form 17-1.202(c) for this facility for the preceding calendar year containing at least the following information pursuant to Subsection 403.061(13), F.S.:

- (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 20TH day  
of January, 1994

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
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Howard L. Rhodes  
Director  
Division of Air Resources  
Management