



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

KA532-96-01
May 7, 1996

Willard Hanks
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
MAY 14 1996
BUREAU OF
AIR REGULATION

Subject: Sunbelt Resources, Inc. (AC37-216863B)
Mobile Soil Remediation Unit
Air Operation Permit Application

Dear Mr. Hanks:

This enclosed permit application is a request for an initial operation permit for the subject unit. The application is accompanied by a check for \$1,500.00 as the appropriate fee.

If you have any questions, please feel free to contact me. Thank you for your consideration and assistance in reviewing this application.

Sincerely,

Mark A. Hagmann
KOGLER & ASSOCIATES

2440

61-01/620
BRANCH 194

SUNBELT RESOURCES, INC.
Ph 205-758-3657
P.O. Box 2703
Tuscaloosa, Al 35403

5-13 1996

PAY
TO THE
ORDER OF

Florida Department of Environmental Protection \$ 1,500.00
One Thousand Five Hundred and 00/100

DOLLARS Security features include ink blots on back

AMSOUTH
AmSouth Bank of Alabama
Tuscaloosa, Alabama 35401

SUNBELT RESOURCES INC.

Roberto Jimenez

FOR Fl. Permit (AC37-2168638)
⑈002440⑈ ⑆062000019⑆ 71430598⑈

CHARLARD STYLE 2



Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - SHORT FORM

See Instructions for Form No. 62-210.900(2)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope of this application and the purpose for which this application is being submitted. This section also includes information on the owner or authorized representative of the facility and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application


Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: Sunbelt Resources, Inc.	
2. Site Name: Mobile Soil Thermal Treatment Unit	
3. Facility Identification Number: [X] Unknown	
4. Facility Location: (Mobile Unit) Street Address or Other Locator: City: County: Zip Code:	
5. Relocatable Facility? [X] Yes [] No	6. Existing Permitted Facility? [X] Yes [] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	5-14-96
2. Permit Number:	7770064-004-A0

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative: Bob Jamison, President
2. Owner/Authorized Representative Mailing Address: Organization/Firm: Sunbelt Resources, Inc. Street Address: 5453 Jug Factory Road City: Tuscaloosa State: AL Zip Code: 35405
3. Owner/Authorized Representative Telephone Numbers: Telephone: (205) 758-3657 Fax: (205) 349-4288
4. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative* of the facility addressed in this Application for Air Permit. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>5/13/96</u>

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

Emissions Unit ID	Description of Emissions Unit	Permit Type
001	Mobile Thermal Soil Remediation Plant with a Baghouse and an Afterburner	AC1E

Purpose of Application

This Application for Air Permit is submitted to obtain (check one):

Initial air operation permit for one or more existing, but previously unpermitted, emissions units.

Initial air operation permit for one or more newly constructed or modified emissions units.

Current construction permit number: AC37-216863B

Air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number: _____

Operation permit to be revised: _____

Air operation permit renewal.

Operation permit to be renewed: _____

Application Processing Fee

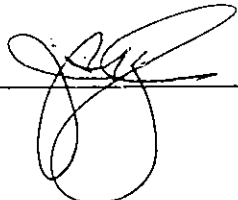
Check one:

[] Attached - Amount: \$ 1,500.00 [] Not Applicable.

Construction/Modification Information

1. Description of Alterations: NA
2. Date of Commencement of Construction: NA

Professional Engineer Certification

1. Professional Engineer Name: John B. Koogler, PhD., P.E. Registration Number: 12925
2. Professional Engineer Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 N.W. 13th Street City: Gainesville State: FL Zip Code: 32609
3. Professional Engineer Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158
4. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [X] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> _____ Signature  _____ (seal) _____ Date <u>5/8/96</u>

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact: Mark A. Hagmann-Envirnomenta Consultant
2. Application Contact Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 NW 13th Street City: Gainesville State: FL Zip Code: 32609
3. Application Contact Telephone Numbers: Telephone: (352) 377 - 5822 Fax: (352) 377 - 7158

Application Comment

<p>NA</p>

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: NA Zone: _____ East (km): _____ North (km): _____			
2. Facility Latitude/Longitude: NA Latitude (DD/MM/SS): _____ Longitude (DD/MM/SS): _____			
3. Governmental Facility Code: 0	4. Facility Status Code: C	5. Facility Major Group SIC Code: 16	6. Facility SIC(s): 1622
7. Facility Comment (limit to 500 characters): <p>Sunbelt Resources, Inc. plans on using this unit state wide as a mobile soil thermal treatment unit. Currently, the facility may operate in Polk, Gulf, Okaloosa, Duval, Orange, Dade, Monroe, Wakulla and Escambia Counties. The facility may operate in any other county within Florida after completing the public notice requirement and receiving Department authorization to operate in the county.</p>			

Facility Contact

1. Name and Title of Facility Contact: David Peterson, Vice President			
2. Facility Contact Mailing Address: Organization/Firm: Sunbelt Resources, Inc. Street Address: 5453 Jug Factory Road City: Tuscaloosa State: AL Zip Code: 35405			
3. Facility Contact Telephone Numbers: Telephone: (205) 758-3657 Fax: (205) 349-4288			

Facility Regulatory Classifications

1. Small Business Stationary Source? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown
2. Title V Source? <input checked="" type="checkbox"/> No
3. Synthetic Non-Title V Source by Virtue of Previous Air Construction Permit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Construction Permit Number/Issue Date: _____ November 22, 1995
4. One or More Emission Units Subject to NSPS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Facility Regulatory Classifications Comment (limit to 200 characters) NA

B. FACILITY SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the facility as a whole. (Supplemental information related to individual emissions units within the facility is provided in Subsection III-B of the form.) Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Department has on file
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Department has on file

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A and B) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Type of Emissions Unit Addressed in This Section

Check one:

- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): 50 TPH mobile soil thermal treatment unit with air pollution controlled by an afterburner and baghouse.	
2. Emissions Unit Identification Number: <input type="checkbox"/> No Corresponding ID <input checked="" type="checkbox"/> Unknown	
3. Emissions Unit Status Code: C	4. Emissions Unit Major Group SIC Code: 16
5. Emissions Unit Comment (limit to 500 characters): Major components of the emissions unit consist of a contaminated soil feed bin, bin to dryer belt conveyor, dryer, baghouse, and an afterburner.	

Emissions Unit Information Section (1 of 1)

Emissions Unit Control Equipment

A.

1. Description (limit to 200 characters):

Fabric Filters-High Temperature (T>250F)

2. Control Device or Method Code: **016**

B.

1. Description (limit to 200 characters):

Direct-Flame Afterburner

2. Control Device or Method Code: **019**

C.

1. Description (limit to 200 characters): **NA**

2. Control Device or Method Code: **NA**

Emissions Unit Information Section (1 of 1)

Emissions Unit Details

1. Initial Startup Date: NA
2. Long-term Reserve Shutdown Date: NA
3. Package Unit: Manufacturer: Tarmac Equipment Company, Inc. Model Number:
4. Generator Nameplate Rating: MW
5. Incinerator Information: Dwell Temperature: 1500 °F Dwell Time: 1.0 seconds Incinerator Afterburner Temperature: 1500 °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: 30 mmBtu/hr to dryer / 14 mmBtu/hr to afterburner
2. Maximum Incineration Rate: NA lb/hr tons/day
3. Maximum Process or Throughput Rate: 50 TPH contaminated soil 220,000 TPY contaminated soil
4. Maximum Production Rate: NA
5. Operating Capacity Comment (limit to 200 characters): This emissions unit will be synthetically limited based on limiting the annual process rate of contaminated soil and the annual fuel usage rate. The heat input to the dryer is 30 MMBtu/hr and to the afterburner is 14 MMBtur/hr.

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	4400 hours/year

B. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

<p>1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Department has on file</p>
<p>2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Department has on file</p>
<p>3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Department has on file</p>
<p>4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested Department has on file</p>
<p>5. Compliance Test Report <input checked="" type="checkbox"/> Attached, Document ID: <u> 001 </u> <input type="checkbox"/> Previously submitted, Date: _____ <input type="checkbox"/> Not Applicable</p>
<p>6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>8. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

DOCUMENT 001

Sunbelt Resources did not operate the mobile soil thermal treatment unit in Florida during 1995. Therefore, demonstration of compliance for an initial operating permit is not applicable.

The attached compliance report was originally submitted in March of 1994. Sunbelt Resources is resubmitting this report in lieu of a current compliance test report. As a condition of the operating permit we are suggesting that compliance be demonstrated upon operating in Florida.

**EMISSION STUDIES
PARTICULATE , OPACITY,
AND CARBON MONOXIDE**

BAGHOUSE STACK

SUNBELT RESOURCES

PORT ST. JOE, FLORIDA

MARCH, 1994

TTL, Inc.

PRACTICING IN THE GEOSCIENCES

SUMMARY OF TEST RESULTS

Table 1 is a summary of the results of the tests performed March 10, 1994, on the baghouse stack effluent gas from Sunbelt Resources located in Port St. Joe, Florida.

The particulate concentrations were 0.0095, 0.0125 and 0.0108 gr/dscf during the test, for an average concentration of 0.0109 gr/dscf. -

The particulate mass emission rates were 1.12, 1.54 and 1.26 lb/hr during the test, for an average mass emission rate of 1.31 lb/hr.

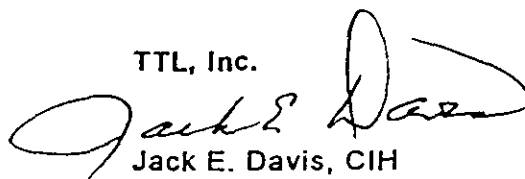
Table 2 is a summary of the visible emission monitoring performed on the baghouse stack. During these test, no set of 24 points of monitoring exceed 5% opacity limit for this discharge stack. Results of each set of data is enclosed in the appendix along with a statistical evaluation of the raw data.

Table 3 is summary of the carbon monoxide (CO) monitoring during the method 5 sampling of the effluent gas. The results showed the average concentration of CO was 13.1 ppm. The carbon monoxide concentration never exceeded the permit standard of 100 ppm at any time during the 3 hours of particulate sampling.

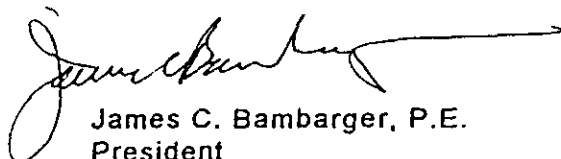
During the test, the average characteristic of the discharge stack were as follows:

Temperature	254.7°F
Moisture	14.79%
Velocity	88.393 fps
Flow	22,098 ACFM

TTL, Inc.



Jack E. Davis, CIH
Vice President



James C. Bambarger, P.E.
President

Table 1: Summary of Particulate Test

Run No.	#1	#2	#3	Average
Stack Gas Temperature (F)	262.7	246.6	248.4	254.7
Moisture Content (% by Volume)	15.16	14.43	15.66	14.79
Stack Gas Velocity (actual ft/sec)	88.360	89.998	86.819	88.393
Volume Flow Rate (actual cfm)	22090	22500	21705	22098
Volumetric Flow Rate (dscfm)	13721	14417	13673	13937
Particulate Concentration (gr/dscf)	0.0095	0.0125	0.0108	0.0109
Particulate Concentration Adjusted to 12% CO ₂ (gr/dscf)	0.0162	0.0408	0.0167	0.0245
Particulate Concentration Adjusted to 50% Excess Air (gr/dscf)	0.0159	0.0452	0.0186	0.0266
Particulate Emission Rate (lb/h)	1.12	1.54	1.26	1.31
% Isokinetic	100.25	98.31	99.31	99.29

Table 2: Summary of Average Opacity

Set Number	Run #1	Run #2	Run #3
1	0.00	0.00	1.46
2	0.00	0.00	2.29
3	0.00	0.00	2.92
4	0.00	0.00	3.13
5	0.00	0.00	1.67
6	0.00	0.00	1.25
7	0.00	0.00	1.67
8	0.00	0.00	3.54
9	0.00	0.00	3.13
10	0.00	0.00	2.71
Average	0.00	0.00	2.38
Maximum	0.00	0.00	3.54
Minimum	0.00	0.00	1.25

**Table 3: SUMMARY CARBON MONOXIDE
MONITORING**

10:20 AM	13 ppm
10:30 AM	15 ppm
10:40 AM	8 ppm
10:50 AM	16 ppm
11:00 AM	12 ppm
11:10 AM	9 ppm
11:20 AM	13 ppm
11:30 AM	17 ppm
11:40 AM	11 ppm
11:50 AM	9 ppm
12:00 PM	9 ppm
12:10 PM	8 ppm
12:20 PM	8 ppm
12:30 PM	8 ppm
12:40 PM	8 ppm
12:50 PM	8 ppm
1:00 PM	12 ppm
1:10 PM	13 ppm
1:20 PM	16 ppm
1:30 PM	20 ppm
1:40 PM	24 ppm
1:50 PM	18 ppm
2:00 PM	18 ppm
2:10 PM	11 ppm
2:20 PM	13 ppm
2:30 PM	12 ppm
2:40 PM	12 ppm
2:50 PM	19 ppm
3:00 PM	15 ppm
3:10 PM	18 ppm
3:20 PM	13 ppm

Average	13.1 ppm
Standard Deviation	4.14 ppm
Variance	17.2 ppm
Maximum	24 ppm
Minimum	8 ppm