



**KOGLER & ASSOCIATES**  
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
904/377-5822 ■ FAX 377-7158

352

**RECEIVED**  
JUN 20 1996  
BUREAU OF  
AIR REGULATION

KA 450-96-04  
June 11, 1996

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

**D.E.R.**

**JUN 18 1996**

**SOUTHWEST DISTRICT  
TAMPA**

Subject: Title V/FESOP Applications  
KleenSoil International, Incorporate  
Mobile Soil Remediation Unit #2

Dear Mr. Hanks:

Enclosed are four copies of the FESOP & Title V applications for the subject facility.

KleenSoil International, Inc. will curtail operations in order to escape Title V applicability. The HAP emissions will be below 10 tpy for any individual HAP and 25 tpy for total HAPs.

The enclosed FESOP & Title V applications are being jointly submitted. We are requesting the evaluation of the Title V application be delayed in order to allow time to evaluate the FESOP application. Once the FESOP is issued, then a request will be made to withdraw the Title V application.

No fees are associated with this request because the facility is still currently subject to Title V.

If you have any questions concerning this matter please call me at (904) 377-5822.

(352)

Sincerely,

Mark A. Hagmann  
KOOGLER & ASSOCIATES

AC 16-189522A



Read File

# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

June 28, 1996

Mr. Mark A. Hagmann  
Koogler & Associates Environmental Services  
4014 NW Thirteenth Street  
Gainesville, Florida 32609

Re: Title V/FESOP Applications  
KleenSoil International, Inc. *FORMERLY ANDERSON COLUMBIA, FORMERLY DRE*  
Mobile Soil Remediation Unit #2

Dear Mr. Hagmann:

As we discussed during our telephone conversation of June 27, 1996, the Department is returning the air operation permit applications you submitted for the referenced Mobile Soil Remediation Unit #2, because Unit #2 has not yet been constructed. We can not process an operation permit application for an emission unit which does not exist.

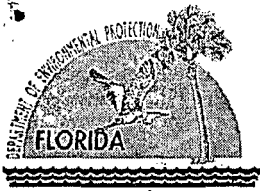
If you have any questions concerning this matter, please contact me at (904)921-9534.

Sincerely,

Cindy L. Phillips, P.E.  
Environmental Manager

c: Trevor Cook, KleenSoil International  
John Koogler, Ph.D., P.E.  
John Brown, P.E.

Cindy -  
I established  
new Airs ID #  
re-linked project  
-----  
new # is  
7775014-001 AF



F30P  
 Returned to Kogler 6/20/96  
 UNIT #2 DOESN'T EXIST

# Department of Environmental Protection

## DIVISION OF AIR RESOURCES MANAGEMENT

### APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) 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

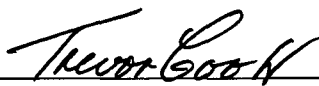

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: <b style="text-align: center;">KleenSoil International, Incorporated</b>	
2. Site Name: <b style="text-align: center;">Mobile Soil Remediation Unit #2</b>	
3. Facility Identification Number: <span style="float: right;">[ X ] Unknown</span>	
4. Facility Location: <b>(Mobile Unit)</b> Street Address or Other Locator: City: <span style="margin-left: 150px;">County:</span> <span style="float: right;">Zip Code:</span>	
5. Relocatable Facility? [ X ] Yes    [ ] No	6. Existing Permitted Facility? [ X ] Yes    [ ] No

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Trevor Cook, Vice President</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address:  Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>
4. Owner/Authorized Representative or Responsible Official Statement:  <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained 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

\* 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.

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>
<b>001</b>	<b>Mobile Thermal Soil Remediation Plant with a Generator, Baghouse and Afterburner</b>	<b>AF2A</b>

**Purpose of Application and Category**

Check one (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
- Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

- Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit to be revised: \_\_\_\_\_

- Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: \_\_\_\_\_

- Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

\_\_\_\_\_

**Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): AC16-189522A

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_  
\_\_\_\_\_

**Category III: All Air Construction Permit Applications for All Facilities and Emissions Units**

This Application for Air Permit is submitted to obtain:

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: \_\_\_\_\_

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): \_\_\_\_\_

- Air construction permit for one or more existing, but unpermitted, emissions units.

**Application Processing Fee**

Check one:

Attached - Amount: \$ \_\_\_\_\_

Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations: <b>NA</b>
2. Projected or Actual Date of Commencement of Construction: <b>NA</b>
3. Projected Date of Completion of Construction: <b>NA</b>

**Professional Engineer Certification**

1. Professional Engineer Name: <b>John B. Koogler, Ph.D., P.E.</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>



4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(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*

*(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.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*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.*

Signature

(seal)

Date

6/11/96

\* Attach any exception to certification statement.

**Application Contact**

1. Name and Title of Application Contact:  <b>Mark Hagmann-Project Engineer</b>
2. Application Contact Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>Florida</b> Zip Code: <b>32609</b>
3. Application Contact Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>

**Application Comment**

**This application is a request for a FESOP.**

**KleenSoil International, Inc. will curtail operations in order to escape Title V applicability. The HAP emissions will be below 10 tpy for any individual HAP and 25 tpy for total HAPs.**

**No fees are associated with this request because the facility is still currently subject to Title V.**

**This FESOP application is being jointly submitted with a Title V application. We are requesting the evaluation of the Title V application be delayed in order to allow time to evaluate the FESOP application. As soon as the FESOP is issued, KleenSoil International, Inc. will withdraw the Title V application.**

**It is our understanding that Title V emissions fees have been paid through 1995 by Anderson Columbia Thermal Systems, Inc.**

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: <b>Mobile Unit</b> Zone: _____ East (km): _____ North (km): _____			
2. Facility Latitude/Longitude: <b>Mobile Unit</b> Latitude (DD/MM/SS): _____ Longitude (DD/MM/SS): _____			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>16</b>	6. Facility SIC(s): <b>1622</b>
7. Facility Comment (limit to 500 characters):  <b>This mobile unit is permitted to operate in all counties in the state of Florida except for Hernando and Okaloosa Counties where KleenSoil International, Incorporated does not plan on operating the portable soil thermal treatment unit.</b>			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Trevor Cook, Vice President</b>		
2. Facility Contact Mailing Address: Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>		
3. Facility Contact Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>		

**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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Synthetic Non-Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Major Source of Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8. One or More Emissions Units Subject to NSPS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. One or More Emission Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Facility Regulatory Classifications Comment (limit to 200 characters):  <b>This facility will no longer be classified as a Title V source once HAPs are limited below the applicable Title V threshold.</b>

**B. FACILITY REGULATIONS**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

**FDEP Core List**

A large, empty rectangular box with a thin black border, occupying most of the page below the 'FDEP Core List' heading. It is intended for the user to provide the core list of rules applicable to the facility.

**List of Applicable Regulations** (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

(NA)


**C. FACILITY POLLUTANTS**

**Facility Pollutant Information**

1. Pollutant Emitted	2. Pollutant Classification
VOC	SM
HAPS	SM

**D. FACILITY POLLUTANT DETAIL INFORMATION**

(NA)

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):  <b>All pollutants are reported in the emissions unit information section.</b>		

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		



## E. FACILITY SUPPLEMENTAL INFORMATION

### 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 checked="" type="checkbox"/> Attached, Document ID: <u>001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

### Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI:  <input type="checkbox"/> Attached, Document ID: _____  <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed  <input checked="" type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached,  Document ID: _____</p> <p><input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>15. Compliance Certification (Hard-copy Required):  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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 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.

**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  <b>Mobile Soil Thermal Treatment Unit</b>		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ <b>X</b> ] Unknown		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ ] Yes [ <b>X</b> ] No	5. Emissions Unit Major Group SIC Code: <b>16</b>
6. Emissions Unit Comment (limit to 500 characters):  <b>Emissions unit consists of a 35 TPH mobile soil thermal treatment unit with air pollution controlled by a baghouse and an afterburner. Major components of the emissions unit are a contaminated soil feed bin, bin to dryer belt conveyor, dryer, generator, baghouse, and an afterburner.</b>  <b>HAPs are below Title V threshold based on FDEP MEMO, dated August 3, 1995, from C. H. Fancy (Subject: Methods of Determining/Quantifying HAPs). See Attachment 005.</b>		

**Emissions Unit Control Equipment**

**A.**

1. Description (limit to 200 characters):  <b>Fabric Filter-High Temperature (T&gt;250F)</b>  <b>Baghouse</b>
2. Control Device or Method Code: <b>016</b>

**B.**

1. Description (limit to 200 characters):  <b>Direct-Flame Afterburner</b>
2. Control Device or Method Code: <b>019</b>

**C.**

1. Description (limit to 200 characters):
2. Control Device or Method Code:

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Details**

1. Initial Startup Date: <b>NA</b>
2. Long-term Reserve Shutdown Date: <b>NA</b>
3. Package Unit: <b>Mobile Thermal Treatment Unit</b> Manufacturer: <b>Industrial Waste, Inc.</b> Model Number:
4. Generator Nameplate Rating: <b>0.20 MW</b>
5. Incinerator Information: Dwell Temperature: <b>1500 °F</b> Dwell Time: <b>1.0</b> seconds Incinerator Afterburner Temperature: <b>1500 °F</b>

**Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: <b>23mmBtu/hr to kiln / 22 mmBtu/hr to afterburner / 1.86 mmBtu/hr to generator</b>
2. Maximum Incineration Rate:                      lb/hr                                      tons/day
3. Maximum Process or Throughput Rate: <b>35.0 tons per hour contaminated soil 306,600 tons per year contaminated soil</b>
4. Maximum Production Rate: <b>NA</b>
5. Operating Capacity Comment (limit to 200 characters):

**Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

**FDEP Core List**

A large empty rectangular box with a black border, intended for the FDEP Core List. The box is currently blank.





**E. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

<p>1. Identification of Point on Plot Plan or Flow Diagram: <b>Attachment 001-Final Exhaust</b></p>
<p>2. Emission Point Type Code:  <input type="checkbox"/> 1            <input type="checkbox"/> 2            <input checked="" type="checkbox"/> 3            <input type="checkbox"/> 4</p>
<p>3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>NA</b></p>
<p>4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>NA</b></p>
<p>5. Discharge Type Code:  <input type="checkbox"/> D            <input type="checkbox"/> F            <input type="checkbox"/> H            <input type="checkbox"/> P  <input type="checkbox"/> R            <input checked="" type="checkbox"/> V            <input type="checkbox"/> W</p>
<p>6. Stack Height: <b>30 feet</b></p>
<p>7. Exit Diameter: <b>3.0 feet</b></p>
<p>8. Exit Temperature: <b>1500 °F</b></p>

Emissions Unit Information Section  1  of  1

9. Actual Volumetric Flow Rate: <b>34,325 acfm</b>		
10. Percent Water Vapor : <b>25 %</b>		
11. Maximum Dry Standard Flow Rate: <b>21,583 dscfm</b>		
12. Nonstack Emission Point Height: <b>NA</b>		feet
13. Emission Point UTM Coordinates: Zone:                      East (km):                      North (km):		
14. Emission Point Comment (limit to 200 characters):  <b>Maximum dry standard flow rate is based on back-calculating from PM emission limit.</b>  $7.4 \text{ lbs/hr} / 0.04 \text{ gdscf} \times 7,000 \text{ grains/lb} / 60 \text{ min/hr} = \mathbf{21,583 \text{ dscfm}}$		

**F. SEGMENT (PROCESS/FUEL) INFORMATION**  
**(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment (  1  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>Solid Waste Disposal/Industrial/Incineration/Single Chamber (Petroleum Contaminated Soil)</b>	
2. Source Classification Code (SCC): <b>5-03-001-02</b>	
3. SCC Units: <b>Tons Burned</b>	
4. Maximum Hourly Rate: <b>35.0 tons burned per hour</b>	5. Maximum Annual Rate: <b>306,600 tons burned per year</b>
6. Estimated Annual Activity Factor: <b>N/A</b>	
7. Maximum Percent Sulfur: <b>N/A</b>	8. Maximum Percent Ash: <b>N/A</b>
9. Million Btu per SCC Unit: <b>N/A</b>	
10. Segment Comment:	

**Segment Description and Rate:** (  2  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Liquefied Petroleum (Propane)</b>	
2. Source Classification Code (SCC): <b>3-90-010-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.497 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>4,355.8 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>NA</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>90.5</b>	
10. Segment Comment: <b>NA</b>	

**Segment Description and Rate:** (  3  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Distillate Oil (# 2 Diesel)</b>	
2. Source Classification Code (SCC): <b>3-90-005-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.332 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>2,911.4 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>***See Attachment 003***</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>141.0</b>	
10. Segment Comment:	

**Segment Description and Rate: ( 4 of 4 )**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): <b>In-Process Fuel: Natural Gas</b>	
2. Source Classification Code (SCC): <b>3-90-006-89</b>	
3. SCC Units: <b>1 Million Cubic Feet Burned</b>	
4. Maximum Hourly Rate: <b>0.045 Million Cubic Feet Burned</b>	5. Maximum Annual Rate: <b>394.2 Million Cubic Feet Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>NA</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>1000</b>	
10. Segment Comment: <b>NA</b>	

**G. EMISSIONS UNIT POLLUTANTS  
(Regulated and Unregulated Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<b>PM</b>	<b>018</b>	<b>NA</b>	<b>EL</b>
<b>PM10</b>	<b>018</b>	<b>NA</b>	<b>NS</b>
<b>NOX</b>	<b>NA</b>	<b>NA</b>	<b>NS</b>
<b>CO</b>	<b>NA</b>	<b>NA</b>	<b>EL</b>
<b>VOC</b>	<b>019</b>	<b>NA</b>	<b>EL</b>
<b>SO2</b>	<b>NA</b>	<b>NA</b>	<b>EL</b>
<b>H017 (Benzene)</b>	<b>019</b>	<b>NA</b>	<b>NS</b>
<b>H104 (Hexane)</b>	<b>019</b>	<b>NA</b>	<b>NS</b>
<b>H169 (Toluene)</b>	<b>019</b>	<b>NA</b>	<b>NS</b>
<b>H181 (Trimethylpentane)</b>	<b>019</b>	<b>NA</b>	<b>NS</b>
<b>H186 (Xylene)</b>	<b>019</b>	<b>NA</b>	<b>NS</b>
<b>HAPS</b>	<b>019</b>	<b>NA</b>	<b>NS</b>

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:  1  of  4**

1. Pollutant Emitted: <b>PM</b>		
2. Total Percent Efficiency of Control: <b>98 %</b>		
3. Potential Emissions:	<b>7.98 lb/hour</b>	<b>34.9 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.04 grains/dscf</b> Reference: <b>Process Knowledge</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Emissions from kiln/afterburner:</b>  $21,583 \text{ dscfm} \times 0.04 \text{ gdscf} \times 11\text{lb}/7,000 \text{ grains} \times 60 \text{ min/hr} = 7.4 \text{ lbs/hr}$ $7.4 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 32.4 \text{ tons/yr}$  <b>Generator:</b>  $1.86 \text{ mmBtu/hr from diesel fuel} \times 0.31 \text{ lb-PM/mmBtu} = 0.58 \text{ lbs/hr}$ $0.58 \text{ lbs PM/hr} \times 8760 \text{ hrs}/2000 \text{ lbs} = 2.53 \text{ tons/}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		



**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>7.4 lb/hour</b>	<b>32.4 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 5</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>Rule Basis: 62-296.415(2)(a), F.A.C.</b>		
<b>There are no applicable emission standards for the generator. Therefore, the allowable emissions limit in Field 4 does not include emissions associated with the generator.</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  2  of  4

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		%
3. Potential Emissions:	<b>11.19 lb/hour</b>	<b>48.95 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>100 ppm CO/ft<sup>3</sup> gas x (28/385) lb CO/ft<sup>3</sup> for Dryer and Afterburner</b> Reference: <b>Rule 62-296.415(1)(b)</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Emissions from kiln/afterburner:</b>  $21,583 \text{ dscfm} \times 60 \text{ min/hr} \times (100 \times 10^{-6}) \text{ CO/ft}^3 \text{ gas} \times (28/385) \text{ lb CO/ft}^3 = 9.42 \text{ lbs/hr}$ $9.42 \text{ lbs CO/hr} \times 8760 \text{ hrs/2000 lbs} = 41.25 \text{ tons/yr}$  <b>Generator:</b>  $1.86 \text{ mmBtu/hr from diesel fuel} \times 0.95 \text{ lb CO/mmBtu} = 1.77 \text{ lbs/hr}$ $1.77 \text{ lbs CO/hr} \times 8760 \text{ hrs/2000 lbs} = 7.7 \text{ tons/yr}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>9.42 lb/hour</b>	<b>41.2 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>62-297.500, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>Rule Basis: 62-296.415(1)(b)</b>		
<b>There are no applicable emission standards for the generator. Therefore, the allowable emissions limit in Field 4 does not include emissions associated with the generator.</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  3  of  4

1. Pollutant Emitted: <b>VOC</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>14.65 lb/hour</b>	<b>64.2 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>1,400 lb/hr VOC in Soil x Efficiency</b> Reference: <b>Based on material balance analysis</b>		
7. Emissions Method Code: <input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>(Afterburner destruction efficiency of 99% min.)</b>  <b>From soil:</b> 1,400 lb/hr VOC in Soil x (1-.99) = <b>14.0 lbs/hr</b> 14.0 tons/hr VOC x 8,760 hrs/yr / 2,000 lb/ton = <b>61.3 tons/yr</b>  <b>From generator:</b>  1.86 mmBtu/hr from diesel fuel x 0.35 lb VOC/mmBtu = <b>0.65 lbs/hr</b> 0.65 lbs VOC/hr x 8760 hrs/2000 lbs = <b>2.85 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>This pollutant is synthetically limited based on limiting contaminant level in soil.</b>		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>14.0 lb/hour</b>	<b>61.3 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>62-297.410, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>AC16-189522A</b>		
<b>There are no applicable emission standards for the generator. Therefore, the allowable emissions limit in Field 4 does not include emissions associated with the generator.</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  4  of  4

1. Pollutant Emitted: <b>SO2</b>		
2. Total Percent Efficiency of Control:	<b>NA</b>	%
3. Potential Emissions:	<b>15.4 lb/hour</b>	<b>67.6 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>(0.003 x 2) lb/SO<sub>2</sub>/lb fuel</b> Reference: <b>Stoichiometry</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>From Drum/Afterburner:</b>  0.319 gal/hr x 7.5 lb/gal x (0.003 x 2) lb/SO <sub>2</sub> lb fuel = <b>14.36 lb/hr</b> 14.36 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>62.9 tons/yr</b>  <b>From Generator:</b>  1.86 mmBtu/hr from diesel fuel x 0.29 lb SO <sub>2</sub> /mmBtu = <b>0.54 lbs/hr</b> 0.54 lbs SO <sub>2</sub> /hr x 8760 hrs/2000 lbs = <b>2.36 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Emissions Unit Information Section   1   of   1**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>15.4 lb/hour</b>	<b>67.6 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Certified Fuel Analysis</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>AC16-189522A</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitation:** Visible Emissions Limitation  1  of  1

1. Visible Emissions Subtype: <b>VE5</b>	
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <b>5 %</b> Exceptional Conditions: <b>5 %</b> Maximum Period of Excess Opacity Allowed: <b>0 min/hour</b>	
4. Method of Compliance: <b>EPA Method 9 (30-minutes, @ exhaust of afterburner)</b>	
5. Visible Emissions Comment (limit to 200 characters):  <b>Basis: 62-296.415</b>  <b>This opacity limitation applies to the final exhaust stack</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions:                      %                      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	



**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System:** Continuous Monitor  1  of  1

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO</b>
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: <b>Thermal Environmental Instruments</b> Model Number: <b>48 (Thermo Electron)</b> Serial Number: <b>NA</b>	
5. Installation Date: <b>NA</b>	
6. Performance Specification Test Date: <b>NA</b>	
7. Continuous Monitor Comment (limit to 200 characters):	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number:      Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

**1. Increment Consuming for Particulate Matter or Sulfur Dioxide?**

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously; for nitrogen dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
SO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
NO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
4. Baseline Emissions:			
PM	0 lb/hour	0 tons/year	
SO2	0 lb/hour	0 tons/year	
NO2		0 tons/year	
5. PSD Comment (limit to 200 characters):			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

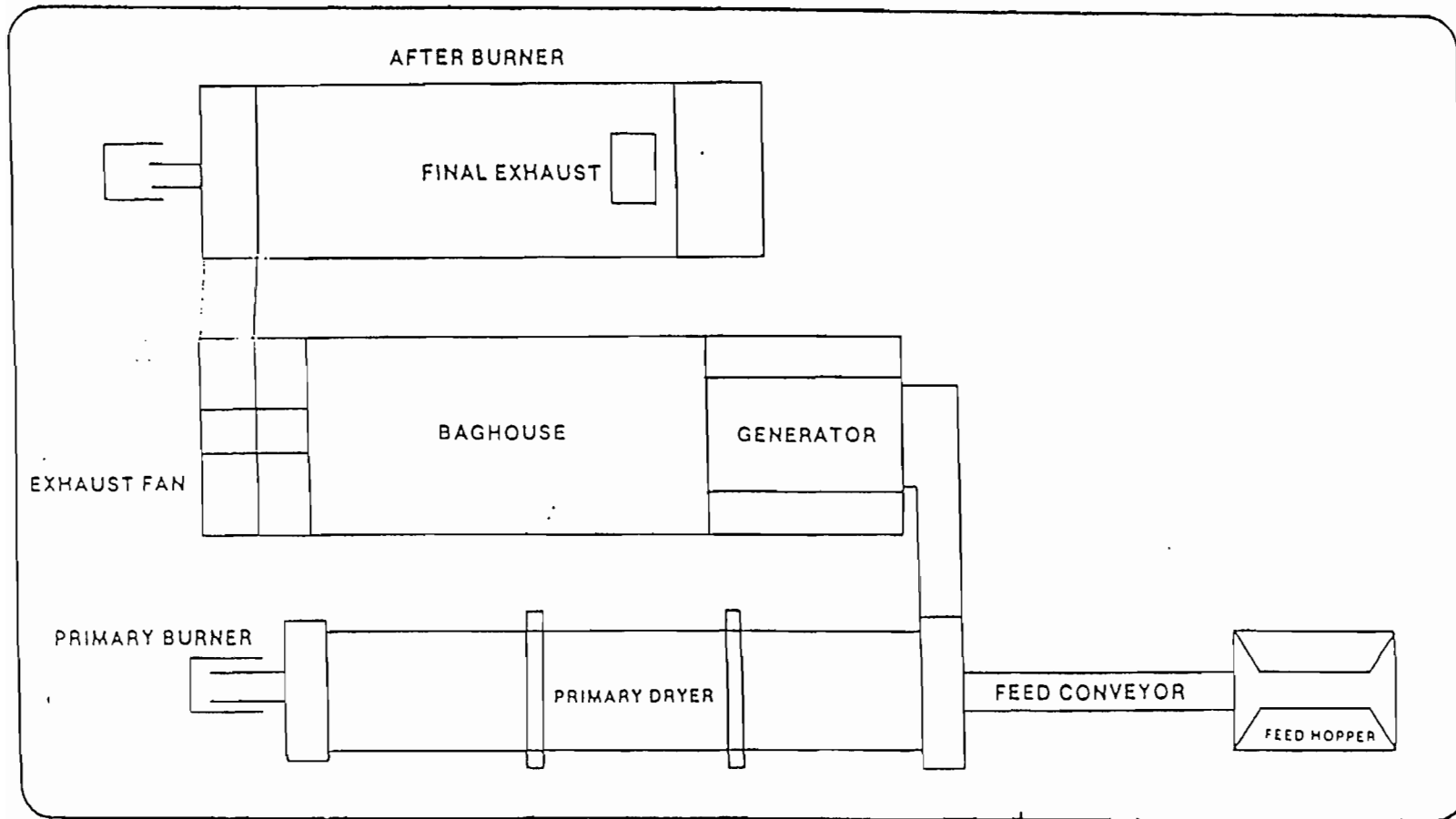
**Supplemental Requirements for All Applications**

<p>1. Process Flow Diagram  <input checked="" type="checkbox"/> Attached, Document ID: <u>001</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</p>
<p>2. Fuel Analysis or Specification  <input checked="" type="checkbox"/> Attached, Document ID: <u>003</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</p>
<p>3. Detailed Description of Control Equipment  <input checked="" type="checkbox"/> Attached, Document ID: <u>004</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</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</p>
<p>5. Compliance Test Report  <input type="checkbox"/> Attached, Document ID: _____   <input type="checkbox"/> Previously submitted, Date: _____   <input checked="" 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. Supplemental Information for Construction Permit Application  <input type="checkbox"/> Attached, Document ID: _____    <input checked="" type="checkbox"/> Not Applicable</p>
<p>9. Other Information Required by Rule or Statute  <input type="checkbox"/> Attached, Document ID: _____    <input checked="" type="checkbox"/> Not Applicable</p>

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <b>005-DEP MEMO</b> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required)  <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____  <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____  <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____  <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____  <input checked="" type="checkbox"/> Not Applicable

# MOBILE THERMAL TREATMENT UNIT



Attachment 002  
**SECTION II: FACILITY INFORMATION**  
**PART D: FACILITY SUPPLEMENTAL INFORMATION**

**QUESTION 4: Precautions to Prevent Emissions of Unconfined Particulate Matter**

The handling of the processed soil and vehicle traffic will likely be the most significant sources of unconfined particulate matter emissions.

- The control of unconfined particulate matter emissions from processed soil will be controlled by water spray as necessary.
- The control of emissions resulting from vehicle movement will be controlled, as necessary, by the application of a chemical dust suppressant or water.

**QUESTION 5: FUGITIVE EMISSIONS IDENTIFICATION**

The generation of fugitive particulate matter emissions during the handling of contaminated soil is expected to be minimal; primarily because of the inherent moisture content of this material. If fugitive emissions do become a problem during the handling of contaminated soil (during the receiving, storage, or transfer to the processing plant), these emissions will be controlled by water sprays.

Attachment 003

Fuel Specifications

KleenSoil International, Incorporated requests permission to use virgin No. 2 fuel oil, natural gas or propane for the kiln and afterburner and No. 2 fuel oil for the generator.

The fuels will be fired singularly to the kiln and afterburner. It is possible that one fuel might be fired to the kiln while a different type of fuel is fired to the afterburner. It is not proposed, however, that a mixture of two or more fuels will be fired co-currently to either the kiln or the afterburner. If the blending and co-firing of fuels does appear feasible in the future, an amendment to the permit will be requested.

During a 30-day rolling average the sulfur content will not exceed 0.3 percent. The maximum sulfur content requested is 0.75 percent.

To provide the Department with assurance that the sulfur content of the virgin No. 2 fuel oil will neither exceed 0.75% maximum nor 0.3% on a 30-day average, Kleen Soil International, Incorporated will require oil suppliers to provide certification of the sulfur content of each shipment of fuel and the quantity of fuel contained in each shipment, Kleen Soil International, Incorporated can maintain a running average of the sulfur content of the fuels used during each month, Kleen Soil International, Incorporated can assure itself and the Department that the 30-day average sulfur content of the fuel will not exceed 0.3%. The records of fuel deliveries and the running 30-day average fuel sulfur levels will be maintained and available for the Department's review, as required by applicable state regulations.

The record keeping will include records of individual shipments of fuel and cumulative quantities of fuel received during each calendar year and records of the monthly average sulfur contents of the virgin No. 2 diesel fuel. Additionally, Kleen Soil International, Incorporated will maintain records of fuel use during each day of plant operation and of the number of hours that the plant operates each day. These records will include the amount and type of fuel consumed.

FUEL ANALYSIS

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	Natural Gas	No. 2 Fuel Oil	Propane
Percent Sulfur	Nil	0.30	Nil
Percent Ash	Nil	Nil	Nil
Percent Nitrogen	Nil	Nil	Nil
Density (lb/gal)	1 lb/23.8 ft <sup>3</sup>	7.5	5.0
Heat Capacity (BTU/gal)	1,000 SCF	141,000	90,500
Other Contaminants	None	None	None

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**Attachment 004**

**Detailed Description of Control Equipment**

**Baghouse:**

Max No. Bags: 420 Nomex Bags; 8" diameter and 10' long

Media Area: 2931 sq. ft.

Total Filter CFM: 34,325 acfm

Air to Cloth Ratio: 11.7 to 1

Control Efficiency: 98.4%

**Afterburner:**

Control Efficiency: 99%

Dwell Temperature: 1500 °F

Dwell Time: 1.0 second

Incinerator Afterburner Temperature : 1500 °F

Stack Ht: 30.0 ft

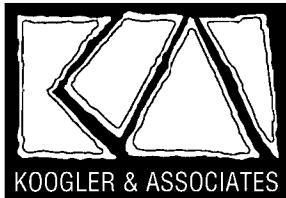
Stack Diameter: 3.0 ft<sup>2</sup>

TABLE C-4. VAPOR PROFILE OF NORMAL GASOLINE

HAZARDOUS AIR POLLUTANT <sup>a</sup>	HAP TO VOC RATIO (percentage by weight)		
	MINIMUM	ARITHMETIC AVERAGE	MAXIMUM
Hexane	0.3	1.6	4.4
Benzene	0.2	0.9	2.2
Toluene	0.4	1.3	4.0
2,2,4 Trimethylpentane (iso-octane)	0.03	0.8	2.6
Xylenes	0.05	0.5	1.5
Ethylbenzene	0.03	0.1	0.5
<b>TOTAL HAPS<sup>b</sup></b>	<b>2.0</b>	<b>4.8</b>	<b>11.0</b>

<sup>a</sup> Cumene and naphthalene were also identified in some of the data points in small quantities. They are not shown as their addition does not significantly change the analysis.

<sup>b</sup> The total HAP ratios shown in the table are not simply sums of the individual HAPs. Total HAPs were calculated for each individual sample in the data base and the values represented in the table reflect the maximum, minimum, and arithmetic average total HAPs of these samples.



**KOOGLER & ASSOCIATES**  
**ENVIRONMENTAL SERVICES**  
4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 ■ FAX/377-7158

KA 450-96-04  
February 23, 1998

Cindy L. Phillips, P.E.  
Administrator, Title V Section  
FDEP-Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**RECEIVED**

**FEB 26 1998**

**BUREAU OF  
AIR REGULATION**

Subject: KleenSoil International, Inc. (Mobile Soil Remediation Unit #1)  
FESOP Application #7770029-002-AF  
**Response to Request for Additional Information Dated July 24, 1996**

Dear Cindy Phillips:

This letter is in response to your Request for Additional Information dated July 24, 1996. All questions have been reproduced, preserving your order. The responses follow each question.

**1. On page 8 of the application, it is stated that "KleenSoil International, Inc. will curtail operations in order to escape Title V applicability." Please explain what is meant by "curtail operations".**

RESPONSE:

KleenSoil International, Inc. will limit the annual throughput rate of contaminated soil to 214,000 tpy in order to limit HAP emissions below 10 tpy for any single HAP and 25 tpy for total HAPs. Please refer to revised page 8 of the FESOP Application.

**2. On pages 9 and 16 of the application, the facility and emission unit SIC codes are listed as 1622 and 16, respectively. SIC code 1622 is for general contractors primarily engaged in the construction of bridges, tunnels, and elevated highways. Please explain why you chose this SIC code instead of SIC code 4953. SIC code 4953 is for establishments primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, etc., and is consistent with the SCC you selected for the emission unit.**

RESPONSE:

Department of Environmental Protection staff suggested that we use SIC code 1622 for the mobile soil remediation unit. However, we concur that SIC code 4953 is more applicable. Please refer to revised pages 9, 18, & 79 of the FESOP Application.

**3. On page 13, the facility pollutant information is incomplete. All pollutants subject to a limitation at an emission unit need to be listed.**

RESPONSE:

Please refer to revised page 13 of the FESOP Application for the requested information.

**4. On page 14, the requested emissions cap (e.g., 7 TPY total HAPS) and related facility pollutant detail information were not provided. Please complete this section.**

RESPONSE:

The instructions for Section D. (Facility Pollutant Detail Information) state that a

“multi-unit or facility-wide emissions cap occurs only when the group of emissions units or the facility as a whole is limited to an amount of emissions less than the sum of the potential emissions of the individual emissions units. For example, if two emissions units are each permitted to operate 8760 hours per year, but together are limited to 12,000 total hours of operation, the result is an emissions cap. Do not request, as a multi-unit or facility-wide emissions cap, any restriction on potential emissions that result directly from restrictions placed on the potential emissions of individual emissions units.”

KleenSoil International, Inc. requests a Facility-Wide CAP for Total HAPS. Please refer to page 14 of the FESOP Application.

**5. On page 19, the emissions unit control equipment is described as a direct-flame afterburner. The correct control device or method code for a direct-flame afterburner is 021, but the code for a catalytic afterburner, 019, is listed instead. (019 is also listed on page 29.) Is the control equipment a direct-flame afterburner or a catalytic afterburner?**

RESPONSE:

The correct control device is a direct-flame afterburner. Please refer to revised pages 19 & 29 of the FESOP Application for the requested information.

**6. On page 20 there is no model number listed in the emission unit details. Is there a serial number or other type of number on the unit which can be used for**

**identification purposes? Since this is a mobile unit, a unique number would be helpful for a compliance inspector to positively identify the unit.**

RESPONSE:

The model # is CS6028 Drier. Please refer to revised page 20 of the FESOP Application for the requested information.

**7. On page 20, the dwell temperature and incinerator afterburner temperature are listed as 1500 °F. The currently permitted temperatures are 1600 °F. Please explain why the temperature is to be lowered, why there is no reported reduction in the control efficiency resulting from the lowered temperature at the same dwell time, and why the maximum heat input needs to remain the same.**

RESPONSE:

Rule 62-296.415(1)(a), F.A.C. requires that a soil thermal treatment facility shall be designed and operated to expose the organic vapors from the soil during thermal treatment to one of the following combinations:

Minimum Temperature (F)	Minimum Time (Seconds)
1,500	1.0
1,600	0.5
1,800	0.3

In order to comply with the above referenced requirement KleenSoil International will operate the afterburner at 1,600 F for a minimum retention time of 0.5 Seconds. Please refer to the calculation below:

$$\text{Afterburner Velocity} = 11,500 \text{ dscfm} \times (1600 \text{ F} + 460 \text{ F}) / (68 \text{ F} + 460 \text{ F}) / (1 - 0.25) / (\pi \times 25 \text{ ft}^2 / 4) / 60 \text{ sec/min} = 50.8 \text{ ft/sec}$$

$$\text{Retention Time} = 32 \text{ ft (length of Afterburner)} / 50.8 \text{ ft/sec} = \underline{0.63 \text{ sec} > 0.5 \text{ sec}}$$

Please refer to revised page 20 of the FESOP Application for the requested information.

**8. On page 20, the maximum heat input rate of 1.86 MMBTU/hr to the generator is included with the maximum heat input rate of the kiln/afterburner emission unit. The diesel generator needs to be treated as a separate emission unit and the appropriate additional pages need to be submitted.**

RESPONSE:

Please refer to EU002 of the revised FESOP Application for the requested information.

**9. On page 20, please explain how you will determine the amount of soil that is decontaminated and how you will determine the VOC concentration in the soil. Also, what records will be kept by the owner for compliance assurance?**

RESPONSE:

Procedures in Rule 62-775.410, F.A.C. are followed to determine the amount of soil that is decontaminated. The VOC concentration in the soil is determined by comparing the difference in concentrations of the pretreated soil analyses with the posttreated soil analyses. Please refer to Attachment 007 for additional information.

**10. On page 23, please explain why emission point type code “3” was selected. This would seem to be an emission point type “1”. Does the generator have a separate exhaust? If so, a separate emission point information page needs to be completed for it.**

RESPONSE:

The generator and the mobile soil remediation unit are included in the revised FESOP Application as separate emissions units. EU001 & EU002 are both emission point type code “1”. Please refer to revised pages 23 & 84 of the FESOP Application for the requested information.

**11. On page 24, please explain how the maximum dry standard flow rate can be calculated from the PM emission limit if, on page 30, the PM emission limit is calculated from the maximum dry standard flow rate.**

RESPONSE:

KleenSoil International, Inc. is requesting that the maximum dry standard flow rate be based on the maximum dry standard flow rate recorded during compliance testing. Please refer to Attachment 008 (Particulate Matter Emission Measurements-August 15, 1991) and revised page 24 of the FESOP Application.

**12. On page 26, please provide the maximum percent sulfur on a weight-percent basis to the nearest 0.1 percent (as required in the application form instructions.)**

RESPONSE:

The Gas Processors Association (GPA) provides product specifications for liquefied petroleum gases. Propane, as referenced in GPA Standard 2140-92, Figure 2-1, has a sulfur content of 185 ppmw.

AP-42 Version 5, Appendix A (A-5) states that the sulfur content in propane is negligible.

Please refer to Attachment 003 and revised page 26 of the FESOP Application for the requested information.

**13. On page 27, if the generator has a separate exhaust, the distillate oil usage for the generator needs to be subtracted and place on its own segment page.**

RESPONSE:

Please refer to EU002 of the revised FESOP Application for the requested information.

**14. On page 29, please recheck the primary control device codes. The code for PM and PM10 is listed as 018, but listed as 016 on page 18. The primary control device code for the VOC and HAPS is listed as 019, but should be 021 if it is a direct-flame afterburner. Since ethylbenzene (H085) is listed in the vapor profile for gasoline, it should also be included on the pollutant list. The HAPS pollutant regulatory code should be EL if you want to limit the HAP emissions.**

RESPONSE:

The correct primary control device code for PM is 016. Please refer to revised page 29 of the FESOP Application for the requested information.

The correct primary control device code for VOC and HAPs is 021. Please refer to revised page 29 of the FESOP Application for the requested information.

**15. Soils containing reformulated or oxygenated gasoline probably contain methyl tert butyl ether (MTBE). Please address this with listing on page 29 under emissions unit pollutants, if such soils are being decontaminated. If not, please confirm. The table you used for HAPS in gasoline contains representative amounts of HAPS in normal gasoline.**

RESPONSE:

Please refer to revised pages 40-71 of the FESOP Application for additional pollutant detail information pages.

**16. On page 30, the given reference for the emission factor of 0.04 gr/dscf is “process knowledge”. Please elaborate. Isn’t this just based upon the allowable emission limit in 62-296.415(3)?**

RESPONSE:

The given reference for the emission factor of 0.04 gr/dscf is based on the allowable emission limit in 62-296.415(3). Please refer to revised page 30 for the requested information.

**17. On page 30, in the calculation of kiln/afterburner PM emissions, please explain how the 21,583 dscfm was obtained. In the calculation of generator PM emissions, please explain how the 0.31 lb-PM/mmBtu emission factor was derived. (The generator should have its own “H. Emission Unit Pollutant Detail Information” pages.)**

RESPONSE:

The dry standard flow rate of 21,583 dscfm was based on the permitted hourly particulate matter rate of 7.4 lbs/hr and 0.04 grains/dscfm in Rule 62-296.415(3). However, based on recently reviewed compliance tests (August 15, 1991, May 21, 1991, and February 7, 1992) and the information below the correct flow rate should be 11,500 dscfm.

Please note that the original air construction permit application had a particulate matter calculation based on a grain loading standard of 0.08 grains/dscf (36,077 acfm at 1600 °F with no correction factor for moisture content). The issued air construction permit (AC16-187650) had a PM emissions limitation of 7.4 lbs/hr and 32.4 tpy which was based on the calculation in the application. When AC16-187650A was issued S.C. 11 was revised to reference the 0.04 grains/dscf in Rule 62-296.415(3), but the lbs/hr and tpy particulate matter emissions limitations were not changed.

Therefore, KleenSoil International, Inc. is requesting that the particulate matter allowable emissions limit be based on 0.04 grains/dscf in Rule 62-296.415(3) and the maximum dry standard flow rate recorded during compliance testing. Please refer to Attachment 008 (Particulate Matter Emission Measurements-August 15, 1991) and revised pages 30 & 31 of the FESOP Application.

Hourly:  $0.04 \text{ gr/dscfm} \times 11,500 \text{ dscfm} \times 60 \text{ min/hr} / 7000 \text{ gr/dscf} = 3.94 \text{ lb/hr of PM}$   
Annual:  $3.94 \text{ lb/hr of PM} \times 8760 \text{ hrs/yr} / 2000 \text{ lb/ton} = 17.3 \text{ tpy of PM}$

**18. On page 31, please submit the requested allowable emissions and units (0.04 gr/dscf).**



RESPONSE:

Please refer to revised page 31 of the FESOP Application for the requested information.

**19. On page 32, please explain how the 0.95 lb CO/mmBtu emission factor was derived.**

RESPONSE:

The emission factor is based on AP-42 Version 5, Table 3.3-2. Please refer to EU002 in the revised FESOP application for the requested information.

**20. On page 33, please submit the requested allowable emissions and units (100 ppm).**

RESPONSE:

Please refer to revised page 33 of the FESOP Application for the requested information.

**21. On page 34, please explain how the 0.35 lb VOC/mmBtu emission factor was derived.**

RESPONSE:

The emission factor is based on AP-42 Version 5, Table 3.3-2. Please refer to EU002 in the revised FESOP application.

**22. Please submit Pollutant Detail Information pages for total HAPS, including metals.**

RESPONSE:

Please refer to revised pages 40-71 of the FESOP Application for additional pollutant detail information pages.

**23. On page 36, please explain how the 0.29 lb/SO<sub>2</sub>/mmBtu emission factor was derived.**

RESPONSE:

The emission factor is based on AP-42 Version 5, Table 3.3-2. Please refer to EU002 in the revised FESOP application for the requested information.

**24. Please explain why the total of the drum/afterburner and generator emissions does not add up to the total potential emissions listed on page 36 and the total equivalent allowable emissions listed on page 37.**

RESPONSE:

Please refer to revised pages 36 & 37 of the FESOP Application for the requested information.

**25. On page 37, please submit the requested allowable emissions and units (0.3% by wt. avg. sulfur in fuel).**

RESPONSE:

Please refer to revised page 39 of the FESOP Application for the requested information.

**26. Please submit visible emissions information for the generator exhaust.**

RESPONSE:

Please refer to EU002 of the revised FESOP Application for the requested information.

**27. On page 39, please submit the CEM serial number and installation date.**

RESPONSE:

This information will be provided in a later submittal.

**28. Please explain where/how the fuel analysis in Attachment 003 was derived. Please submit an actual fuel analysis as an example.**

RESPONSE:

Fuel specifications were derived from AP-42 Version 5, Appendix A (A-5). Actual fuel analyses are not available for #2 fuel oil, since the unit has only fired propane. The data in Attachment 003 represents typical specifications for #2 fuel oil, propane, and natural gas.

Please refer to revised Attachment 003 of the FESOP Application for the requested information.

**29. Please submit a justification for why a waiver is requested for the description of stack sampling facilities. Describe the proposed capability to conduct stack sampling.**

RESPONSE:

A waiver was requested for Section L. Field 4 (Description of Stack Sampling Facilities) since the capabilities have not changed since the original submittal of the air construction permit application by DRE Environmental, Inc. on October 10, 1990.

The stack sampling facilities for EU001 satisfy requirements of Rule 62-297.310(6), F.A.C. and meet OSHA Standards described in 29 CFR 1910, Subparts D & E.

There are no applicable stack sampling requirements for EU002.

**30. Please submit the most recent stack sampling results as required in specific condition no. 19 of the current operating permit AO16-231440.**

RESPONSE:

KleenSoil International, Inc. has not operated the soil remediation unit in the State of Florida, and therefore no compliance stack sampling results are provided. However, upon obtaining a job in Florida, KleenSoil International, Inc. will conduct the required compliance testing and submit the stack sampling results to the Department as required in operating permit AO16-231440.

**31. Please revise the diagram in Attachment 001 to include the generator exhaust (if applicable.)**

RESPONSE:

Please refer to revised Attachment 001 of the FESOP Application for the requested information.

**32. Are all of the PM emissions assumed to be PM10?**

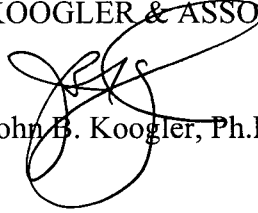
RESPONSE:

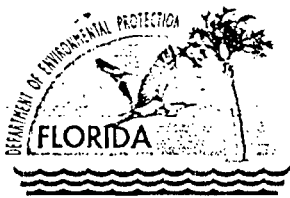
Yes, all of the PM emissions are assumed to be PM10.

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

Sincerely,

KOOGLER & ASSOCIATES

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



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

## FAX TRANSMITTAL SHEET

TO: MARK HAGGMAN, KOOGLER & ASSOC.

DATE: 6/26/96 PHONE: \_\_\_\_\_

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 8

FROM: CINDY PHILLIPS

DIVISION OF AIR RESOURCES MANAGEMENT

RE: KLEENSOIL UNIT #?

COMMENTS: THESE DOCUMENTS MAY HELP YOU DETERMINE WHICH

UNIT YOU ARE TRYING TO PERMIT: MARCH 8, 1996 LETTER;

FEB. 7, 1996 LETTER; JAN. 25, 1996 LETTER (WHICH INCLUDES TWO

PERMIT TRANSFER APPLICATIONS); AND A 5/9/93 CERTIFICATE

OF COMPLETION OF CONSTRUCTION FOR UNIT #1. (WE ALSO HAVE

A TEST REPORT ON FILE) THE UNITS WERE ORIGINALLY DRE  
AND TRANSFERRED TO ANDERSON COLUMBIA  
BEFORE TRANSFERRED TO KLEENSOIL.

GIVE ME A CALL IF YOU HAVE ANY QUESTIONS - OR ANSWERS.

PHONE: (904) 921-9534

FAX NUMBER: 904/922-6979

If there are any problems with this fax transmittal, please call the above phone number.



Best Available Copy

Will's  
03/08/96

Department of  
Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

March 8, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Thomas, President  
TranSoil Inc.  
20711 U.S. Highway 98  
Dade City, Florida 33525

Dear Mr. Thomas:

Re: Transfer of Permits  
AO16-231440 and AC16-189522B  
03700017 03700017

The Department has reviewed your January 25 and February 7 letters requesting that Anderson Columbia Thermal Systems permit Nos. AO16-231440 (Unit 1) and AC16-189522A (Unit 2) for mobile soil thermal treatment facilities be transferred to KleenSoil International, Incorporated and the expiration date of the permits be clarified. These requests are approved. The relocation notification requirements in Rule 62-210, F.A.C., are also being added to the permits. The reference permits are:

TRANSFERRED (AO16-231440 and AC16-189522B):

From: Anderson Columbia Thermal Systems  
Post Office Box 1386  
Lake City, Florida 32056-1386

FORMERLY DRE

To: KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, Florida 34221

KleenSoil is responsible for any future operation of these units.

EXPIRATION DATES:

July 15, 1998 for AO16-231440 (Unit 1)  
November 1, 1996, or 240 days after commencing operation,  
whichever occurs first, for AC16-189522B (Unit 2)

Mr. David A. Thomas  
Page Two  
A016-231440 and AC16-189522B

NEW SPECIFIC CONDITION (A016-231440 and AC16-189522B):

At least 7 days prior to relocating the plant, the permittee shall notify the air program administrator for the Department's District and, if applicable, county air program administrator, of the next site in Florida where the unit will be operated at. The notification will be on DEP Form 62-210.900(3), F.A.C. The notification shall include 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. Unless notified otherwise by an environmental agency, the unit may be relocated and operated at the new site. The Department will notify the permittee of any new restrictions for the facility that will apply while it is operating at the new site (Rule 62-775.700(1), F.A.C.).

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of their receipt of this intent. 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;

*etc., etc...*



3755  
2222 / 228082

"Setting the standard for Soil Treatment"

February 7, 1996

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

Dear Mr. Hanks:

Further to our recent conversation regarding the Mobile Treatment unit from Anderson Columbia.

We are enclosing a check for \$500.00 and requesting that you re-issue the following Permits in the name of KleenSoil International Inc.

AC16-187650A  
 AC16-189522A  
 AO16-231440

It is my understanding that these permits will expire in February, 1977.

Sincerely

Trevor Cook  
 V.P. Operations

enc.

TC/ljr

RECEIVED

FEB 13 1996

MAILROOM # 2



**TRANSOIL INC**

An Atlas Environmental Company

fee?  
Table V same?

**RECEIVED**

JAN 29 1996

BUREAU OF  
AIR REGULATION

January 25, 1996

Certified Mail Number Z 781 654 898

20711 U.S. Highway 98  
Dade City, FL 33525  
(904) 583-3323

Operations/Marketing  
Fax (904) 583-3393

Administration  
Fax (904) 583-4478

Mr. Willard Hanks  
Florida Department of Environmental Protection  
Bureau of Air Regulation  
Permitting & Standards Section  
2600 Blairstone Road  
Tallahassee, FL 32399-2400

Dear Mr. Hanks:

KleenSoil International, Inc. (KSI) has acquired the Mobile Thermal Treatment Unit that has been owned by Anderson Columbia Thermal Systems (ACTS).

As part of the transfer of ownership, I have enclosed two applications for transfer of permit. Since ACTS has two permits with FDEP, KSI acquired both permits as part of the purchase.

Please process the transfers as soon as you can and return the original permits to me. If you have any questions please call Trevor Cook, Vice President of Operations of KSI at 813-723-2700.

Sincerely,  
KleenSoil International, Inc.

David A. Thomas, President

enc

cc: W. Hanks  
J. Holborn

**KleenSoil  
International, Inc.**

13838 Harlee Road  
Palmetto, FL 33471  
(813) 723-2700  
Fax (813) 722-7743

**South Florida  
Thermal Services, Inc.**

1 Foxmoor Lane  
P.O. Box 309  
Moore Haven, FL 33471  
(813) 946-3300  
Fax (813) 946-3931

**Florida Specialized  
Carriers, Inc.**

20711 U.S. Highway 98  
Dade City, FL 33525  
(904) 583-3323  
Fax (904) 583-4478





# Department of Environmental Protection

Lawton Chiles  
Governor

Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7590

Virginia B. Wetherell  
Secretary

## APPLICATION FOR TRANSFER OF PERMIT

Permit No. AC-16-187650A Date Issued 1/01/95 Date Expires 1/01/96

### NOTIFICATION OF SALE OR LEGAL TRANSFER

Source Name: Anderson Columbia Thermal Systems County: Columbia  
Source Location: 2 Guerdon Road City: Lake City  
Permittee Name: John R. Fulkerson Title: Vice President  
Mailing Address: P.O. Box 1386  
Lake City, FL 32056-1386

The undersigned hereby notifies the department of the sale or legal transfer of this pollution source. He further agrees to assign his rights as permittee to the applicant in the event the department agrees to the transfer of permit.

Sworn to and subscribed before me at Columbia  
County, Lake City, Florida  
this 11<sup>th</sup> day of January 19 96  
Penny S. Faris  
Signature of Permittee  
Vice President  
Title  
Date: 1/11/96

Notary Public PENNY S. FARIS  
My Commission Expires: Notary Public, State of Florida  
My Comm. expires Dec. 31, 1996

### REQUEST FOR TRANSFER OF PERMIT

Source Name: KleenSoil International, Inc.  
Applicant Name: David A. Thomas Title: President  
Mailing Address: 20711 US Hwy 98  
Dade City, FL 33525 Telephone: (904) 583-3323

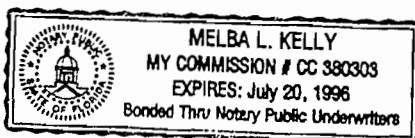
Project Engineer Name: Koogler & Associates Environmental Services  
Mailing Address: 4014 NW 13th Street  
Gainesville, FL 32609 Telephone: (904) 377-5822

The undersigned hereby notifies the department of his having acquired title to this pollution source. He further states that he has examined the application and documents submitted by the current permittee the basis on which Permit No. AC-16-187650A was issued by the department, and states that they accurately and completely describe the permitted activity or project. He further states that he is familiar with the permit, agrees to comply with its terms and conditions, and agrees to assume the rights and liabilities contained therein. He also agrees to promptly notify the department of any future change in ownership of, or responsibility for, the permitted activity or project.

Sworn to and subscribed before me at Pasco  
County, Dade City, FL  
this 25th day of January 19 96  
Melba L. Kelly  
Signature of Applicant  
President  
Title  
Date: 1/25/96

My Commission Expires:

\* Attach letter of authorization if other than owner or corporate officer.





# Department of Environmental Protection

Lawton Chiles  
Governor

Northeast District  
7825 Baymeadows Way, Suite B200  
Jacksonville, Florida 32256-7590

Virginia B. Wetherell  
Secretary

## APPLICATION FOR TRANSFER OF PERMIT

Permit No. AC-16-189522A Date Issued 1/01/95 Date Expires 1/01/96

### NOTIFICATION OF SALE OR LEGAL TRANSFER

Source Name: Anderson Columbia Thermal Systems County: Columbia  
Source Location: 2 Guerdon Road City: Lake City  
Permittee Name: John R. Fulkerson Title: Vice President  
Mailing Address: P.O. Box 1386  
Lake City, FL 32056-1386

The undersigned hereby notifies the department of the sale or legal transfer of this pollution source. He further agrees to assign his rights as permittee to the applicant in the event the department agrees to the transfer of permit.

Sworn to and subscribed before me at Columbia  
County, Lake City, Florida Signature of Permittee  
this 11th day of January 19 96 Title Vice President  
Penny S. Faris Date: 1/11/96  
Notary Public

My Commission Expires:

Penny S. Faris  
Notary Public, State of Florida  
My Comm. expires Dec. 19, 1997  
Comm. No. 00427766

### REQUEST FOR TRANSFER OF PERMIT

Source Name: KleenSoil International, Inc.  
Applicant Name: David A. Thomas Title: President  
Mailing Address: 20711 US Hwy 98  
Dade City, FL 33525 Telephone: 904, 583-3323

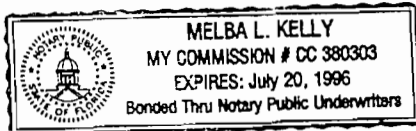
Project Engineer Name: Koogler & Associates Environmental Services  
Mailing Address: 4014 NW 13th Street  
Gainesville, FL 32609 Telephone: 904, 377-5822

The undersigned hereby notifies the department of his having acquired title to this pollution source. He further states that he has examined the application and documents submitted by the current permittee the basis on which Permit No. AC-16-189522A was issued by the department, and states that they accurately and completely describe the permitted activity or project. He further states that he is familiar with the permit, agrees to comply with its terms and conditions, and agrees to assume the rights and liabilities contained therein. He also agrees to promptly notify the department of any future change in ownership of, or responsibility for, the permitted activity or project.

Sworn to and subscribed before me at Pasco Signature of Applicant  
County, Dade City, FL Title President  
this 25th day of January 19 96 Date: 1/25/96  
Melba L. Kelly  
Notary Public

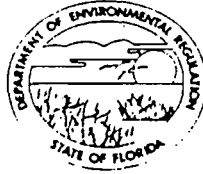
My Commission Expires:

\* Attach letter of authorization if other than owner or corporate officer.



\$1,500 pd.  
5-18-93  
Receipt # 180857

AD16-231440



RECEIVED

MAY 18 1993

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
Division of Air Resources Management

AIR POLLUTION SOURCES  
CERTIFICATE OF COMPLETION OF CONSTRUCTION\*

PERMIT NO. AC16-187650 DATE: May 9, 1993

Company Name: DRE Environmental, Inc. County: Portable

Source Identification(s): Soil Remediation Incinerator (Portable)

Actual costs of serving pollution control purpose: \$ 350,000

Operating Rates: 35 tph Design Capacity: 35 tph

Expected Normal 30 tph During Compliance Test 20 tph

Date of Compliance Test: Feb. 25-26, 1993 (Attach detailed test report)

Test Results:	Pollutant	Actual Discharge	Allowed Discharge
	<u>Particulate</u>	<u>.03566 grains/dscf</u>	<u>.04 grains/dscf</u>
	<u>VOC</u>	<u>.10 lbs/hr</u>	<u>22.8 lbs/hr</u>

Date plant placed in operation: in Florida Feb 15, 1993

This is to certify that, with the exception of deviations noted\*\*, the construction of the project has been completed in accordance with the application to construct and Construction Permit No. AC16-187650 dated \_\_\_\_\_.

A. Applicant:

Chris Sleeper, President  
Name of Person Signing (Type) Chris M. Sleeper  
Signature of Owner or Authorized Representative and Title

Date: May 11, 1993 Telephone: (904) 758-3164

B. Professional Engineer:

Dole J. Kelley, Jr., P.E.  
Name of Person Signing (Type) Dole J. Kelley, Jr.  
Signature of Professional Engineer

Dole J. Kelley, Consulting Engineer  
Company Name Florida Registration No. 6519

Date: 5-11-93

(Seal)

P.O. Box 10428 Jacksonville, FL. 32207  
Mailing Address  
(904) 731-7760  
Telephone Number

\*This form, satisfactorily completed, submitted in conjunction with an existing application to construct permit and payment of application processing fee will be accepted in lieu of an application to operate.

\*\*As built, if not built as indicated include process flow sketch, plot plan sketch, and updates of applicable pages of application form.



**KOOGLER & ASSOCIATES**  
**ENVIRONMENTAL SERVICES**

4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
352/377-5822 ■ FAX/377-7158

KA 450-96-04  
January 19, 1998

Cindy L. Phillips, P.E.  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Subject: Motion for Extension of Time to File a Petition  
7770029-002-AF

Dear Mrs. Phillips:

Attached is a request for an extension of time to file for a hearing in accordance with Rule 62-103.070, FAC. The original copy was sent to Doug Beason, OGC of the Department.

If you have any questions concerning this request, please do not hesitate to contact me.

Sincerely

Mark Hagmann  
KOOGLER & ASSOCIATES

Enc.

cc: Trevor Cook, KleenSoil International, Inc.  
Doug Beason, OGC

**RECEIVED**

JAN 21 1998

BUREAU OF  
AIR REGULATION

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application  
for Air Permit by:

Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, FL 34221

DEP File No. 7770029-002-AF


**MOTION FOR EXTENSION OF TIME**

The Applicant, KleenSoil International, Inc., by and through its undersigned Engineer of Record and pursuant to Rule 62-103.070, FAC, requests the Secretary of DEP to grant an extension of time until June 1, 1998 in which to file a petition. The additional time will allow KleenSoil International, Inc. to submit additional information to FDEP on the above referenced permit and resolve any other permitting issues.

The FDEP permitting engineer, Cindy L. Phillips, P.E. has indicated that she has no objection to such an extension.

Dated the 19th day of January 1998, in Gainesville, Alachua County, Florida

KOOGLER & ASSOCIATES  
Environmental Services



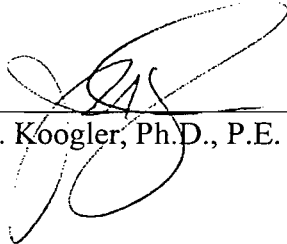
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John B. Koogler, Ph.D., P.E.  
Florida Registration No. 12925  
4014 N.W. 13th Street  
Gainesville, FL 32609  
(904) 377-5822  
Engineer of Record for  
KleenSoil International, Inc.



CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been furnished to Doug Beason, OGC, DEP, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000; Cindy L. Phillips, P.E., FDEP, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and Trevor Cook, Vice President, KleenSoil International, Inc., 13838 Harlee Road, Palmetto, FL 34221 by U.S. Mail, this 19th day of January, 1998.

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



*Cindy's file*

Florida Department of  
**Environmental Protection**

**Memorandum**

**TO:** Howard L. Rhodes  
**THRU:** C. H. Fancy *CHF*  
**THRU:** Scott M. Sheplak *smsh*  
**FROM:** Cindy L. Phillips *CP*  
**DATE:** January 7, 1998  
**SUBJECT:** Denial of Permit  
KleenSoil International, Inc.

*1/9*

Attached for your approval and signature is a Notice of Permit Denial for a soil thermal treatment facility. The FESOP application was submitted on July 2, 1996. Due to severe financial problems and the inability to pay their consultant for additional work on their permit application, the applicant requested an extended amount of time to answer our request for additional information. On November 5, 1997, the Department notified the applicant that unless they took some action on this permit application within 30 days, the permit would be denied.

No action has been taken. I recommend that the permit be denied.

*concur*  
*CP*



*Cindy's File*

# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

State of Florida  
Department of Environmental Protection  
Notice of Permit Denial

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

In the matter of an  
Application for Permit by:

DEP File No. 7770029-002-AF

Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, Florida 34221

The applicant, KleenSoil International, Inc., applied on July 2, 1996, to the Department of Environmental Protection for a FESOP (Federally enforceable state operation permit) to become a synthetic non-Title V source, pursuant to Rule 62-210.300(2)(b), F.A.C.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes (F.S.), and Chapters 62-4 and 62-210, Florida Administrative Code (F.A.C.). The Department has determined that an air operation permit is required for the proposed work.

The Department hereby denies the permit for the following reasons:

1. The applicant did not supply the information requested in the Department's letter, dated July 24, 1996, that is needed to process the application.
2. The applicant did not respond to the Department's letter, dated November 5, 1997, requesting a plan of action.

A person whose substantial interests are affected by this permit denial may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of receipt of this permit denial. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code. Mediation is not available for this action.



Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
DEP File No. 7770029-002-AF  
January 7, 1998  
Page 2 of 4

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the DEP 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 the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this permit amendment. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this permit denial.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
DEP File No. 7770029-002-AF  
January 7, 1998  
Page 3 of 4

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permit denial 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 62-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit denial will not be effective until further order of the Department.

When the Order (Permit Denial) 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 Legal Office; 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 (thirty) days from the date this Notice is filed with the Clerk of the Department.

A copy of this letter shall be kept on file with the referenced permit application.

Sincerely,



Howard L. Rhodes, Director  
Division of Air Resources  
Management



P 265 658 301

US Postal Service  
**Receipt for Certified Mail**

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

Sent to <i>Trevor Cook, Vice President</i>	
Street & Number <i>KleenSoil International, Inc.</i>	
Post Office, State, & ZIP Code <i>13838 Harlee Rd.</i>	
<i>Palmetto, FL 34221</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date <i>01-09-98</i>	

PS Form 3800 April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

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

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
 Mr. Trevor Cook  
 Vice President  
 KleenSoil International, Inc.  
 13838 Harlee Road  
 Palmetto, FL 34221

4a. Article Number  
*P 265 658 301*

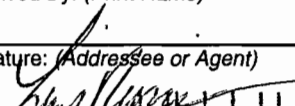
4b. Service Type

<input type="checkbox"/> Registered	<input checked="" type="checkbox"/> Certified
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured
<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> COD

7. Date of Delivery  
*1/12/98*

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)  
*X* 

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR RESOURCES MANAGEMENT  
BUREAU OF AIR REGULATION - TITLE V  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400

**RECEIVED**

MS 5505

JAN 14 1998

BUREAU OF  
AIR REGULATION

**PERMITTEE**

KleenSoil International, Inc.  
13838 Harlee Road.  
Palmetto, Florida 34221

**FID No.:** 777029  
**Permit No.:** 777029-002-AF  
**SIC No.:** 4953  
**Expiration Date:** 5 years from  
*date of issuance*

**AUTHORIZED REPRESENTATIVE**

Mr. Trevor Cook, Vice President

**PROJECT**

This permit allows the applicant to operate a Mobile Soil Thermal Treatment Facility in permitted counties in Florida and designates the facility as a synthetic non-Title V source.

**STATEMENT OF BASIS**

This Federally Enforceable State Operating Permit (FESOP) is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-4, 62-210, 62-212, 62-296, and 62-297. The above named permittee is hereby authorized to perform the work or operate the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

**APPENDICES**

The attached appendices are part of this permit:

Appendix GC - General Permit Conditions  
Appendix PC - Permitted Counties

---

Howard L. Rhodes, Director  
Division of Air Resources  
Management

#### **FACILITY DESCRIPTION**

This facility consists of a mobile soil thermal treatment facility with a generator, baghouse and afterburner. The mobile soil thermal treatment facility is regulated under 62-296.415, F.A.C.

#### **REGULATORY CLASSIFICATION**

This facility is a synthetic non-Title V source pursuant to Rule 62-210.300(2)(b), F.A.C. The limitations in this permit directly limit the maximum allowable volatile organic compound (VOC) emissions, which are considered equivalent to total recoverable petroleum hydrocarbon (TRPH) emissions, and limit hazardous air pollutant (HAP) emissions to less than the 10 tons per year (single HAP) and 25 tons per year (total HAPs) limitations that trigger Title V permitting requirements.

#### **RELEVANT DOCUMENTS**

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received Bureau of Air Regulation
- Requests for additional information
- Additional information received
- Public Notice of Intent published

**PERMITTED COUNTIES** *(See attached Appendix PC. This list is subject to change after proof of publication is received. Note: All public notices will be valid until 5 years after the date of publication.)*

**INITIAL OPERATING LOCATION** *(Currently unknown, to be supplied at later date.)*

#### **SECTION I. FACILITY-WIDE SPECIFIC CONDITIONS**

The following specific conditions apply to all emissions units at this facility.

#### **ADMINISTRATIVE**

1. **Regulating Agencies:** Applications for permit renewals, reports, rest, minor modifications, and notifications shall be submitted to the district office or local program that has permitting/compliance jurisdiction over the current or proposed operating location. See Attachment 1 for Department District Office addresses and jurisdictions. See Attachment 2 for local program addresses.
2. **General Conditions:** The owner and operator are subject to and shall operate under the attached General Permit Conditions G.1. through G.15. listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**

3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative code.
4. Forms: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C.  
[Rule 62-210.900, F.A.C.]
5. Notification of Intent to Relocate Air Pollutant Emitting Facility: An air permit for a relocatable facility shall be amended upon **each change of location** of the facility. The owner or operator of the facility must submit a Notification of Intent to Relocate Air Pollutant Emitting Facility (DEP Form No. 62-210.900(6)) to the Department at least seven (7) days prior to the change, if the facility would be relocated to a county in which public notice of the proposed operation of the facility had been given within the previous five years pursuant to Rule 62-210.350(1), F.A.C., or otherwise thirty (30) days prior to the change. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.  
[Rule 62-210.370(1), F.A.C.]
6. Permit Renewals: Prior to sixty days before the expiration of this operation permit, the permittee shall apply for a renewal of a permit using forms incorporated by reference in Rule 62-210.900, F.A.C. A renewal application shall be timely and sufficient. If the application is submitted prior to 60 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rule 62-213.420(1)(b)3. and 4., F.A.C.  
[Rule 62-4.090(1), F.A.C.]
7. Applicable Regulations: Unless otherwise indicated in this permit, the operation of the emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-210, 62-296, and 62-297. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations.  
[Rule 62-210.300, F.A.C.]

#### GENERAL POLLUTANT EMISSION LIMITING STANDARDS

8. Volatile organic compounds emissions or organic solvents emissions: 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.  
[Rule 62-296.320(1), F.A.C.]
9. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.



**[Rule 62-296.320(2), F.A.C.]**

10. General Particulate Emission Limiting Standards. The following emission limiting standards shall apply to emissions units of particulate matter not subject to a particulate emission limit or opacity limit set forth in or established elsewhere in this permit.

- (a) *General Visible Emissions Standard*. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity).
- (b) *Unconfined Emissions of Particulate Matter*.
  1. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
  2. Reasonable precautions committed to by the permittee:
    - a. The control of unconfined particulate matter emissions from processes soil will be controlled by water spray as necessary.
    - b. The control of emissions resulting from vehicle movement will be controlled, as necessary, by the application of a chemical dust suppressant or water.
  3. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

**[Rule 62-296.320(4), F.A.C., and Permit Application received 7/2/96.]**

**OPERATIONAL REQUIREMENTS**

11. Modifications: Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of this chapter, Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C.

**[Rule 62-210.300(1)(a), F.A.C.]**

12. Circumvention: No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

**[Rule 62-210.650, F.A.C.]**

13. Hours of Operation: This facility is allowed to operate continuously, i.e., 8760 hours/year.

**[Rule 62-210.200, F.A.C., Definitions (PTE)] and applicant request.]**

14. Excess Emissions:

- (a) Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
- (b) Excess emissions which are caused entirely or in part by poor maintenance, poor

operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

**[Rules 62-210.700(1) and (4), F.A.C.]**

#### COMPLIANCE MONITORING AND TESTING REQUIREMENTS

15. Operating Rate During Testing: Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

**[Rule 62-297.310(2), F.A.C.]**

16. Test Procedures shall meet all applicable requirements of Rule 62-297.310(4), F.A.C.

**[Rule 62-297.310(4), F.A.C.]**

17. Determination of Process Variables:

(a) *Required Equipment*. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) *Accuracy of Equipment*. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

**[Rule 62-297.310(5), F.A.C.]**

18. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

**[Rule 62-297.310(7)(a)9., F.A.C.]**

19. Special Compliance Tests: 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 a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

**[Rule 62-297.310(7)(b), F.A.C.]**

20. Test Reports:

(a) The owner or operator of an emissions unit for which a compliance test is required

shall file a report with the Department on the results of each such test.

- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  - (1) The type, location, and designation of the emissions unit tested.
  - (2) The facility at which the emissions unit is located.
  - (3) The owner or operator of the emissions unit.
  - (4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - (5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - (6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  - (7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - (8) The date, starting time and duration of each sampling run.
  - (9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - (10) The number of points sampled and configuration and location of the sampling plane.
  - (11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  - (12) The type, manufacturer and configuration of the sampling equipment used.
  - (13) Data related to the required calibration of the test equipment.
  - (14) Data on the identification, processing and weights of all filters used.
  - (15) Data on the types and amounts of any chemical solutions used.
  - (16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  - (17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  - (18) All measured and calculated data required to be determined by each applicable test procedure for each run.
  - (19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
  - (20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

(21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

**[Rule 62-297.310(8), F.A.C.]**

21. Plant Operation – Problems: If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.

**[Rule 62-4.130, F.A.C.]**

22. Excess Emissions Report - Malfunctions: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

**[Rule 62-210.700(6), F.A.C.]**

23. An Annual Operating Report for Air Pollutant Emitting Facility, DEP Form No. 62-210.900(5), shall be completed each year. The form shall be submitted to the appropriate Department district office or DEP-approved local program which has permitting/compliance jurisdiction over the facility, by March 1 of the following year.

**[Rule 62-210.370(3), F.A.C.]**

**SECTION II . EMISSIONS UNITS SPECIFIC CONDITIONS**

The following specific conditions apply to the following emissions units:

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	This emissions unit consists of a 35.0 TPH Industrial Waste, Inc. Model CS6028 Mobile Thermal Treatment Unit. Major components of the emission unit are: contaminated soil feed bin, bin-to-dryer belt conveyor, dryer, baghouse, and afterburner.
002	This unit consists of a 0.3 MW Cummins Model NT 855-65 diesel generator.

NOTE: Emissions unit 001 is subject to 62-269.415, F.A.C., Soil Thermal Treatment Facilities. There are no unit specific regulatory requirements that apply to emissions unit 002.

**OPERATIONAL REQUIREMENTS**

1. Hours of Operation: This facility is allowed to operate continuously, i.e., 8760 hours/year. **[Rule 62-210.200, F.A.C., Definitions-potential to emit(PTE)] and applicant request.]**
2. Permitted Capacity: The soil thermal treatment unit may process up to 35.0 TPH (monthly average) and 214,000 TPY(total) of contaminated soil. **[Rule 62-210.200, F.A.C., Definitions-potential to emit(PTE)] and applicant request.]**
3. Operation and Maintenance (O&M): The permittee shall keep an O&M plan for the air pollution control equipment with the facility. The O&M log shall include the list of the parameters being monitored, the frequency of the check/maintenance, observations, and comments. **[Rule 62-4.070(3), F.A.C.]**

**EMISSIONS LIMITATIONS AND PERFORMANCE STANDARDS**

4. This soil thermal treatment facility is only authorized to treat petroleum contaminated soil as defined in Chapter 62-713, F.A.C. **[Rule 62-296.415, F.A.C.]**
5. Volatile Organic Compounds (VOC).
  - (a) A soil thermal treatment facility shall be designed and operated to expose the organic vapors from the soil during thermal treatment to one of the following combinations:

<b>Minimum Temperature (Fahrenheit)</b>		<b>Minimum Time (Seconds)</b>
1,500	and	1.0
1,600	and	0.5
1,800	and	0.3

The minimum temperature shall be determined by a continuous temperature monitor pursuant to the applicable continuous emissions monitoring requirements of Rule 62-296.415(6), F.A.C. When soil is being treated, the minimum temperature shall be met or exceeded at all times except for 4 minutes in any 60 minute period, provided that the temperature does not fall below 100 degrees Fahrenheit of the required minimum temperature for the corresponding residence time. The minimum residence time shall be met or exceeded at all times while soil is being treated.

(b) The average carbon monoxide (CO) emissions shall not exceed 100 parts per million (ppm) by volume, dry basis, during all 60 consecutive minute periods of plant operation. The average CO emissions is the arithmetic mean of all CO concentration measurements during any consecutive 60 minutes of plant operation that were recorded by the continuous emissions monitor required pursuant to Rule 62-297.500, F.A.C.

(c) A soil thermal treatment facility shall continually monitor the temperature and carbon monoxide content of the flue gases leaving the high temperature zone pursuant to the applicable continuous emissions monitoring requirements of Rule 62-296.415(6), F.A.C. Temperature and carbon monoxide monitors shall be co-located unless otherwise approved by the Department.

(d) Soil thermal treatment facilities must possess an air permit authorizing the processing of soils containing polychlorinated biphenyls (PCBs), if soil contaminated with PCBs is to be thermally treated.

[Rule 62-296.415(1), F.A.C.]

6. Visible Emissions. Visible emissions (VE) from a stack shall not exceed 5% opacity as determined by the test method specified in Rule 62-296.415(5), F.A.C. when thermally treating soil.

[Rule 62-296.415(2), F.A.C.]

7. Particulate Matter Emissions. The particulate matter emissions shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf) as determined by the test method specified in Rule 62-296.415(5), F.A.C.

[Rule 62-296.415(3), F.A.C.]

8. Unconfined Emissions. A soil thermal treatment facility is subject to Rule 62-296.320, F.A.C., Unconfined Emissions of Particulate Matter. As a minimum, before and after thermal soil treatment is accomplished, unconfined emissions of particulate matter from the soil shall be controlled by application of water or containment.

[Rule 62-296.415(4), F.A.C.]

9. Test Methods and Procedures. All emissions tests performed pursuant to the requirements of this rule comply with the following requirements.

(a) The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

(b) The test method for particulate emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.

(c) The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C.

(d) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-296.415(5), F.A.C.]

10. Continuous Emissions Monitoring Requirements. Any facility subject to this rule shall be equipped with instruments to continuously monitor and record the temperature and the carbon monoxide concentration of the flue gases leaving the high temperature zone, but before any dilution air is mixed with the flue gases. The temperature monitor shall be certified by the manufacturer to be accurate to within 1% of the temperature being measured. The temperature monitoring system shall be calibrated at least annually by the procedure recommended by the manufacturer. The calibration shall be at a minimum of three temperatures and over a range from 10% below to 10% above the designed flue gas hot zone temperature of the soil thermal treatment facility. Calibration records shall be kept for a minimum of three years. The carbon monoxide monitor shall be certified by the manufacturer to be accurate to within 10% of the carbon monoxide concentration by volume, mean value, or 5% of the applicable standard of 100 ppm, whichever is greater, as determined by EPA Test Method 10 in 40 CFR Part 60, Appendix A, adopted by reference in Rule 62-204.800(7), F.A.C. The carbon monoxide continuous emission monitoring device shall be certified, calibrated, and operated according to Performance Specification 4 of 40 CFR Part 60, Appendix B, adopted by reference in Rule 62-204.800(7), F.A.C., excluding Section 5.2, Calibration Drift Test Period, of Performance Specification 2. [Rule 62-296.415(6), F.A.C.]

11. Reports. Notification of Intent to Relocate Air Pollutant Emitting Facility. An air permit for a relocatable facility shall be amended upon each change of location of the facility. The owner or operator of the facility must submit a Notification of Intent to Relocate Air Pollutant Emitting Facility (DEP Form No. 62-210.900(6)) to the Department at least seven (7) days prior to the change, if the facility would be relocated to a county in which public notice of the proposed operation of the facility had been given within the previous five years pursuant to Rule 62-210.350(1), F.A.C., or otherwise thirty (30) days prior to the change. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated. [Rule 62-210.370(1), F.A.C.]

## ATTACHMENT GS

### GENERAL PERMIT CONDITIONS. [Rule 62-4.160, F.A.C.]

(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 this 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 and used by the permittee to achieve compliance with the conditions of this permit, are 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 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 reasonable 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 noncompliance; and  
(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to educe, 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.

(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 Section 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. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

(11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300 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) This permit also constitutes:

(a) Determination of Best Available Control Technology (BACT)  
(b) Determination of Prevention of Significant Deterioration (PSD)  
(c) Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)

(d) Compliance with New Source Performance Standards

(14) 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:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

(15) 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 corrected promptly.

6/18/99

**ATTACHMENT PC**

**PERMITTED COUNTIES**

The applicant has published the proper public notices and is authorized to operate in the following counties: *This list is subject to change after proof of publication is received.*

<b>Permitted Counties:</b>	<b>Public Notice Valid Until:</b>	<b>Permitted Counties:</b>	<b>Public Notice Valid Until:</b>	<b>Permitted Counties:</b>	<b>Public Notice Valid Until:</b>
Alachua		Hamilton		Okeechobee	
Baker		Hardee		Orange	
Bay		Hendry		Osceola	
Bradford		Hernando		Palm Beach	
Brevard		Highlands		Pasco	
Broward		Hillsborough		Pinellas	
Calhoun		Holmes		Polk	
Charlotte		Indian River		Putnam	
Citrus		Jackson		St. Johns	
Clay		Jefferson		St. Lucie	
Collier		Lafayette		Santa Rosa	
Columbia		Lake		Sarasota	
Dade		Lee		Seminole	
DeSoto		Leon		Sumter	
Dixie		Levy		Suwannee	
Duval		Liberty		Taylor	
Escambia		Madison		Union	
Flagler		Manatee		Volusia	
Franklin		Marion		Wakulla	
Gasden		Martin		Walton	
Gilchrist		Monroe		Washington	
Glades		Nassau			
Gulf		Okaloosa			

**PERMITTEE:**

Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, Florida 34221

**Permit No.:** 777029-002-AF

**County:** Statewide

**Issue Date:**

**Expiration Date:**

**Project:** Mobile Soil Thermal  
Treatment Facility

This Federally Enforceable State Operating Permit (FESOP) is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204 through 62-297 and 62-4. 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 or on file with the department and made a part hereof and specifically described as follows:

For the operation of a soil thermal treatment facility that will establish the facility as a synthetic non-Title V source pursuant to Rule 62-210.300(2)(b), F.A.C. The limitations will directly limit the maximum allowable volatile organic compound (VOC) emissions, which are considered equivalent to total recoverable petroleum hydrocarbon (TRPH) emissions, and will limit hazardous air pollutant (HAP) emissions to less than the 10/25 tons/year, limitations that trigger Title V permitting requirements.

**Specific Conditions**

1. This soil thermal treatment facility is only authorized to treat petroleum contaminated soil as defined in Chapter 62-713, F.A.C.  
[Rule 62-296.415, F.A.C.]

2. Volatile Organic Compounds (VOC).

(a) A soil thermal treatment facility shall be designed and operated to expose the organic vapors from the soil during thermal treatment to one of the following combinations:

Minimum Temperature (Fahrenheit)		Minimum Time (Seconds)
1,500	and	1.0
1,600	and	0.5
1,800	and	0.3

The minimum temperature shall be determined by a continuous temperature monitor pursuant to the applicable continuous emissions monitoring requirements of Rule 62-296.415(6), F.A.C. When soil is being treated, the minimum temperature shall be met or exceeded at all times except for 4 minutes in any 60 minute period, provided that the temperature does not fall below 100 degrees Fahrenheit of the required minimum temperature for the corresponding residence time. The minimum residence time shall be met or exceeded at all times while soil is being treated.

(b) The average carbon monoxide (CO) emissions shall not exceed 100 parts per million (ppm) by volume, dry basis, during all 60 consecutive minute periods of plant operation. The average CO emissions is the arithmetic mean of all CO concentration measurements during any consecutive 60 minutes of plant operation that were recorded by the continuous emissions monitor required pursuant to Rule 62-297.500, F.A.C.

(c) A soil thermal treatment facility shall continually monitor the temperature and carbon monoxide content of the flue gases leaving the high temperature zone pursuant to the applicable continuous emissions monitoring requirements of Rule 62-296.415(6), F.A.C. Temperature and carbon monoxide monitors shall be co-located unless otherwise approved by the Department.

(d) Soil thermal treatment facilities must possess an air permit authorizing the processing of soils containing polychlorinated biphenyls (PCBs), if soil contaminated with PCBs is to be thermally treated.

[Rule 62-296.415(1), F.A.C.]

3. Visible Emissions. Visible emissions (VE) from a stack shall not exceed 5% opacity as determined by the test method specified in Rule 62-296.415(5), F.A.C. when thermally treating soil.

[Rule 62-296.415(2), F.A.C.]

4. Particulate Matter Emissions. The particulate matter emissions shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf) as determined by the test method specified in Rule 62-296.415(5), F.A.C.

[Rule 62-296.415(3), F.A.C.]

5. Unconfined Emissions. A soil thermal treatment facility is subject to Rule 62-296.320, F.A.C., Unconfined Emissions of Particulate Matter. As a minimum, before and after thermal soil treatment is accomplished, unconfined emissions of particulate matter from the soil shall be controlled by application of water or containment.

[Rule 62-296.415(4), F.A.C.]

6. Test Methods and Procedures. All emissions tests performed pursuant to the requirements of this rule comply with the following requirements.

(a) The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

(b) The test method for particulate emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.

(c) The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C.

(d) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-296.415(5), F.A.C.]

7. Continuous Emissions Monitoring Requirements. Any facility subject to this rule shall be equipped with instruments to continuously monitor and record the temperature and the carbon monoxide concentration of the flue gases leaving the high temperature zone, but before any dilution air is mixed with the flue gases. The temperature monitor shall be certified by the manufacturer to be accurate to within 1% of the temperature being measured. The temperature monitoring system shall be calibrated at least annually by the procedure recommended by the manufacturer. The calibration shall be at a minimum of three temperatures and over a range from 10% below to 10% above the designed flue gas hot zone temperature of the soil thermal treatment facility. Calibration records shall be kept for a minimum of three years. The carbon monoxide monitor shall be certified by the manufacturer to be accurate to within 10% of the carbon monoxide concentration by volume, mean value, or 5% of the applicable standard of 100 ppm, whichever is greater, as determined by EPA Test Method 10 in 40 CFR Part 60, Appendix A, adopted by reference in Rule 62-204.800(7), F.A.C. The carbon monoxide continuous emission monitoring device shall be certified, calibrated, and operated according to Performance Specification 4 of 40 CFR Part 60, Appendix B, adopted by reference in Rule 62-204.800(7), F.A.C., excluding Section 5.2, Calibration Drift Test Period, of Performance Specification 2. [Rule 62-296.415(6), F.A.C.]

8. Reports. Notification of Intent to Relocate Air Pollutant Emitting Facility. An air permit for a relocatable facility shall be amended upon each change of location of the facility. The owner or operator of the facility must submit a Notification of Intent to Relocate Air Pollutant Emitting Facility (DEP Form No. 62-210.900(6)) to the Department at least seven (7) days prior to the change, if the facility would be relocated to a county in which public notice of the proposed operation of the facility had been given within the previous five years pursuant to Rule 62-210.350(1), F.A.C., or otherwise thirty (30) days prior to the change. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated. [Rule 62-210.370(1), F.A.C.]



Department of  
**Environmental Protection**

*CM File*

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

CERTIFIED MAIL - Return Receipt Requested

November 5, 1997

Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, Florida 34221

RE: Mobile Soil Remediation Unit #1  
FESOP Application Number 7770029-002-AF

Dear Mr. Cook:

On July 2, 1996, the Department received your application for a FESOP (Federally enforceable state operation permit) to become a synthetic non-Title V source, pursuant to Rule 62-210.300(2)(b), F.A.C. On July 24, 1996, the Department sent you the attached request for additional information concerning the FESOP application. This information has still not been received and is necessary to continue processing your application.

Please let the Department know, within 30 days of receipt of this letter, if you still plan to obtain a permit to operate this unit in Florida. If your plans have changed, and you do not wish to curtail your operations in order to escape Title V applicability, we request that you withdraw the application for the FESOP. If you have no plans to operate the unit in Florida at all, we request that you withdraw your Title V permit application as well.

The Department will issue a permit denial for the FESOP permit if you do not withdraw the FESOP application, respond to our July 24, 1996 letter, or respond to this letter within 30 days.

If you have any questions concerning this request, please contact Cindy L. Phillips, P.E., of this office at (850)921-9534.

Sincerely,

Scott M. Sheplak, P.E.  
Administrator  
Title V Section

SMS/CLP  
attachment

c: Mark A. Hagmann, Koogler & Associates, w/attachment  
Jerry Kissel, SWD, w/attachment

P 265 658 276

US Postal Service

**Receipt for Certified Mail**

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	
Trevor Cook	Kleen Soil International, Inc.
Street & Number	
13838 Harlee Rd.	
Post Office, State, & ZIP Code	
Palmetto, FL 34221	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
Sent 11-10-97 sgh	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

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

I also wish to receive the following services (for an extra fee):

1.  Addressee's Address
2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
Mr. Trevor Cook, Vice President  
Kleen Soil International, Incorporated  
13838 Harlee Road  
Palmetto, Florida 34221

4a. Article Number  
P 265 658 276

4b. Service Type

<input type="checkbox"/> Registered	<input checked="" type="checkbox"/> Certified
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured
<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> COD

7. Date of Delivery  
11/12/97

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)

X

Thank you for using Return Receipt Service.



UNITED STATES POSTAL SERVICE



First-Class Mail  
Postage & Fees Paid  
USPS  
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NOV 14 1997  
BUREAU OF  
AIR REGULATION

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR RESOURCES MANAGEMENT  
BUREAU OF AIR REGULATION - TITLE V  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400

*MS 5505*



Cindy



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

CERTIFIED MAIL - Return Receipt Requested

July 24, 1996

Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, Florida 34221

RE: Mobile Soil Remediation Unit #1  
FESOP Application #7770029-002-AF

Dear Mr. Cook:

On July 2, 1996 the Department received your application for a FESOP to become a synthetic non-Title V source pursuant to Rule 62-210.300(2)(b), F.A.C. In order to continue processing the application, the Department will need the following additional information:

1. On page 8 of the application, it is stated that "KleenSoil International, Inc. will curtail operations in order to escape Title V applicability." Please explain what is meant by "curtail operations".
2. On pages 9 and 16 of the application, the facility and emission unit SIC codes are listed as 1622 and 16, respectively. SIC code 1622 is for general contractors primarily engaged in the construction of bridges, tunnels, and elevated highways. Please explain why you chose this SIC code instead of SIC code 4953. SIC code 4953 is for establishments primarily engaged in the collection and disposal of refuse by processing or destruction or in the operation of incinerators, etc., and is consistent with the SCC you selected for the emission unit.
3. On page 13, the facility pollutant information is incomplete. All pollutants subject to a limitation at an emission unit need to be listed.
4. On page 14, the requested emissions cap (e.g., 7 TPY total HAPS) and related facility pollutant detail information were not provided. Please complete this section.
5. On page 19, the emissions unit control equipment is described as a direct-flame afterburner. The correct control device or method code for a direct-flame afterburner is 021, but the code for a catalytic afterburner, 019, is listed instead. (019 is also listed on page 29.) Is the control equipment a direct-flame afterburner or a catalytic afterburner?
6. On page 20, there is no model number listed in the emission unit details. Is there a serial number or other type of number on the unit which can be used for identification purposes? Since this is a mobile unit, a unique number would be helpful for a compliance inspector to positively identify the unit.

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

*Printed on recycled paper.*

7. On page 20, the dwell temperature and incinerator afterburner temperature are listed as 1500 °F. The currently permitted temperatures are 1600 °F. Please explain why the temperature is to be lowered, why there is no reported reduction in the control efficiency resulting from the lowered temperature at the same dwell time, and why the maximum heat input needs to remain the same.
8. On page 20, the maximum heat input rate of 1.86 MMBTU/hr to the generator is included with the maximum heat input rate of the kiln/afterburner emission unit. The diesel generator needs to be treated as a separate emission unit and the appropriate additional pages need to be submitted.
9. On page 20, please explain how you will determine the amount of soil that is decontaminated and how you will determine the VOC concentration in the soil. Also, what records will be kept by the owner for compliance assurance?
10. On page 23, please explain why emission point type code "3" was selected. This would seem to be an emission point type "1". Does the generator have a separate exhaust? If so, a separate emission point information page needs to be completed for it.
11. On page 24, please explain how the maximum dry standard flow rate can be calculated from the PM emission limit if, on page 30, the PM emission limit is calculated from the maximum dry standard flow rate.
12. On page 26, please provide the maximum percent sulfur on a weight-percent basis to the nearest 0.1 percent (as required in the application form instructions.)
13. On page 27, if the generator has a separate exhaust, the distillate oil usage for the generator needs to be subtracted and placed on its own segment page.
14. On page 29, please recheck the primary control device codes. The code for PM and PM10 is listed as 018, but listed as 016 on page 18. The primary control device code for the VOC and HAPS is listed as 019, but should be 021 if it is a direct-flame afterburner. Since ethylbenzene (H085) is listed in the vapor profile for gasoline, it should also be included on the pollutant list. The HAPS pollutant regulatory code should be EL if you want to limit the HAP emissions.
15. Soils containing reformulated or oxygenated gasoline probably contain methyl tert butyl ether (MTBE). Please address this with listing on page 29 under emissions unit pollutants, if such soils are being decontaminated. If not, please confirm. The table you used for HAPS in gasoline contains representative amounts of HAPS in normal gasoline.
16. On page 30, the given reference for the emission factor of 0.04 gr/dscf is "process knowledge". Please elaborate. Isn't this just based upon the allowable emission limit in 62-296.415(3)?

17. On page 30, in the calculation of kiln/afterburner PM emissions, please explain how the 21,583 dscfm was obtained. In the calculation of generator PM emissions, please explain how the 0.31 lb-PM/mmBtu emission factor was derived. (The generator should have its own "H. Emission Unit Pollutant Detail Information" pages.)
18. On page 31, please submit the requested allowable emissions and units (0.04 gr/dscf).
19. On page 32, please explain how the 0.95 lb CO/mmBtu emission factor was derived.
20. On page 33, please submit the requested allowable emissions and units (100 ppm).
21. On page 34, please explain how the 0.35 lb VOC/mmBtu emission factor was derived.
22. Please submit Pollutant Detail Information pages for total HAPS, including metals.
23. On page 36, please explain how the 0.29 lb SO<sub>2</sub>/mmBtu emission factor was derived.
24. Please explain why the total of the drum/afterburner and generator emissions does not add up to the total potential emissions listed on page 36 and the total equivalent allowable emissions listed on page 37.
25. On page 37, please submit the requested allowable emissions and units (0.3% by wt. avg. sulfur in fuel).
26. Please submit visible emissions information for the generator exhaust..
27. On page 39, please submit the CEM serial number and installation date.
28. Please explain where/how the fuel analysis in Attachment 003 was derived. Please submit an actual fuel analysis as an example.
29. Please submit a justification for why a waiver is requested for the description of stack sampling facilities. Describe the proposed capability to conduct stack sampling.
30. Please submit the most recent stack sampling results as required in specific condition no. 19 of the current operating permit AO16-231440.
31. Please revise the diagram in Attachment 001 to include the generator exhaust (if applicable.)
32. Are all of the PM emissions assumed to be PM10?

Page 4 of 4  
KleenSoil #7770029-002-AF  
July 24, 1996

For your future reference, the following comments are offered:

A. On page 5 of the application, the correct choice under Category II is "Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source." because this is the first request for a FESOP.

B. On page 7, only the first two paragraphs of the P.E. certification statement are applicable. The last paragraph should not have been checked. The FESOP is not being requested because of a newly constructed or modified emission unit.

C. On page 11 and page 21, the FDEP core list is a list of rules to which all Title V sources are presumptively subject. This entire list does not apply to a synthetic non-title V source. In addition, 62-296.415, and 62-204, F.A.C. do apply and should be listed.

D. On page 33, the method of compliance is EPA Method 10 which is adopted by reference in 62-204.800, F.A.C. Rule 62-297.500, F.A.C., has been repealed.

E. On page 34, there appears to be a typographical error in the second equation for the calculation of VOC emissions from the soil. It would seem that the first term in the equation should be 14.0 lbs/hr VOC, not 14.0 tons/hr VOC.

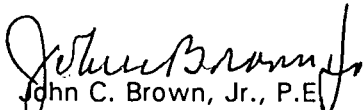
F. On page 35, the method of compliance is a soil analysis per Rule 62-775, F.A.C. Rule 62-297.410, F.A.C., has been repealed.

G. On page 36, there appears to be a typographical error in the first equation for the calculation of SO<sub>2</sub> emissions from the drum/afterburner. It would seem that the first term in the equation should be 0.319 1000 gal/hr, not 0.319 gal/hr.

H. On page 43, Document 005-DEP MEMO is not an applicable requirement. It is a clarification memo.

Please have your professional engineer submit a signed and sealed written response to these questions to this office. If you have any questions, please call me at (904)488-1344.

Sincerely,

  
John C. Brown, Jr., P.E.  
Administrator, Title V Section  
Bureau of Air Regulation

JCB/p  
c: John B. Koogler, Ph.D., P.E.

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

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

I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
- 2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
 Mr. Trevor Cook, Vice President  
 KleenSoil International, Inc.  
 13838 Harlee Road  
 Palmetto, Florida 34221

4a. Article Number  
 Z392 940 859

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

7. Date of Delivery

5. Signature (Addressee)

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

6. Signature (Agent)

PS Form 3811, December 1991 U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 392 940 859



**Receipt for Certified Mail**

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

PS Form 3800, March 1993

Sent to <i>Vice Pres. / KleenSoil International</i>	
<i>Trevor Cook / Inc.</i>	
Street and No. <i>13838 Harlee Rd.</i>	
P.O., State and ZIP Code <i>Palmetto, FL 34221</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date:	

*Mailed 7-24-96*  
*SL*

old at line over top of envelope to the right of the return address

**CERTIFIED**

Z 392 940 859

**MAIL**



Z 392 940 859



**Receipt for Certified Mail**

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

PS Form 3800 March 1993

Sent to <i>Vice Pres. / Kleen Soil International</i>	
<i>Trevor Cook / Inc.</i>	
Street and No. <i>13838 Harlee Rd.</i>	
P.O., State and ZIP Code <i>Palmetto, FL 34221</i>	
Postage	\$
Certified-Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
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1.  Addressee's Address  
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3. Article Addressed to:  
Mr. Trevor Cook, Vice President  
KleenSoil International, Inc.  
13838 Harlee Road  
Palmetto, Florida 34221

4a. Article Number  
Z 392 940 859

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

7. Date of Delivery  
*2/26/91*

5. Signature (Addressee)

6. Signature (Agent)

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

Thank you for using Return Receipt Service.



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Official Business

**RECEIVED**

JUL 29 1996

BUREAU OF  
AIR REGULATION

Print your name, address and ZIP Code here

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR RESOURCES MANAGEMENT  
BUREAU OF AIR REGULATION - TITLE V  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400  
**MS 5505**



PENALTY FOR PRIVATE  
USE TO AVOID PAYMENT  
OF POSTAGE, \$300



CP

7770029-002-AF



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

KA 450-96-04  
July 1, 1996

Cindy L. Phillips, P.E.  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Subject: Title V/FESOP Applications  
KleenSoil International, Incorporate  
Mobile Soil Remediation Unit #1

Dear Ms. Phillips:

Enclosed are four copies of the FESOP & Title V applications for the subject facility.

KleenSoil International, Inc. will curtail operations in order to escape Title V applicability. The HAP emissions will be below 10 tpy for any individual HAP and 25 tpy for total HAPs.

The enclosed FESOP & Title V applications are being jointly submitted. We are requesting the evaluation of the Title V application be delayed in order to allow time to evaluate the FESOP application. Once the FESOP is issued, then a request will be made to withdraw the Title V application.

No fees are associated with this request because the facility is still currently subject to Title V.

If you have any questions concerning this matter please call me at (352) 377-5822.

Sincerely,

Mark A. Hagmann  
KOOGLER & ASSOCIATES

**RECEIVED**  
JUL 2 1996  
BUREAU OF  
AIR REGULATION



**KOOGLER & ASSOCIATES**

ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET  
GAINESVILLE, FLORIDA 32609  
904/377-5822 • FAX 377-7158

177 0029-002-AF

KA 450-96-04

July 1, 1996

Cindy L. Phillips, P.E.  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Subject: ~~Title V~~ FESOP Applications  
DRE? KleenSoil International, Incorporated  
Mobile Soil Remediation Unit #1

*Pathey*  
Will you please enter  
this into the tracking  
system when you get  
a chance. Thanks,  
Cindy

← The unit with a current AO

Dear Ms. Phillips:

Enclosed are four copies of the FESOP & Title V applications for the subject facility.

KleenSoil International, Inc. will curtail operations in order to escape Title V applicability. The HAP emissions will be below 10 tpy for any individual HAP and 25 tpy for total HAPs.

The enclosed FESOP & Title V applications are being jointly submitted. We are requesting the evaluation of the Title V application be delayed in order to allow time to evaluate the FESOP application. Once the FESOP is issued, then a request will be made to withdraw the Title V application.

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If you have any questions concerning this matter please call me at (352) 377-5822.

Sincerely,

Mark A. Hagmann  
KOOGLER & ASSOCIATES





# Department of Environmental Protection

## DIVISION OF AIR RESOURCES MANAGEMENT

### APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) 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

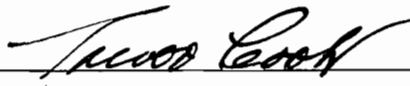
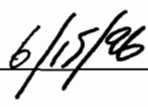
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: <b>KleenSoil International, Incorporated</b>	
2. Site Name: <b>Mobile Soil Remediation Unit #1</b>	
3. Facility Identification Number: <span style="float: right;"><input checked="" type="checkbox"/> Unknown</span>	
4. Facility Location: <b>(Mobile Unit)</b> Street Address or Other Locator: City: <span style="margin-left: 150px;">County:</span> <span style="float: right;">Zip Code:</span>	
5. Relocatable Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	7-2-96
2. Permit Number:	7770029-002-4F
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Trevor Cook, Vice President</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address:  Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>
4. Owner/Authorized Representative or Responsible Official Statement:  <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained 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

\* Attach letter of authorization if not currently on file.



**Purpose of Application and Category**

Check one (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
- Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

- Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit to be revised: \_\_\_\_\_

- Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: \_\_\_\_\_

- Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

\_\_\_\_\_

**Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): \_\_\_\_\_

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

**Category III: All Air Construction Permit Applications for All Facilities and Emissions Units**

This Application for Air Permit is submitted to obtain:

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: \_\_\_\_\_

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): \_\_\_\_\_

- Air construction permit for one or more existing, but unpermitted, emissions units.



**Application Processing Fee**

Check one:

Attached - Amount: \$ \_\_\_\_\_

Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations: NA
2. Projected or Actual Date of Commencement of Construction: NA
3. Projected Date of Completion of Construction: NA

**Professional Engineer Certification**

1. Professional Engineer Name: <b>John B. Koogler, Ph.D., P.E.</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(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*

*(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.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here  if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here  if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*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  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.*

Signature: \_\_\_\_\_ Date: 6/11/96

(seal):  A circular professional engineer seal is stamped over the signature line. The seal contains the text "FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION" around the perimeter and "PROFESSIONAL ENGINEER" in the center. The number "906" is visible within the seal.

\* Attach any exception to certification statement.

**Application Contact**

1. Name and Title of Application Contact:  <b>Mark Hagmann-Project Engineer</b>
2. Application Contact Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>Florida</b> Zip Code: <b>32609</b>
3. Application Contact Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>

**Application Comment**

**This Title V application is being jointly submitted with a FESOP application. We are requesting the evaluation of the Title V application be delayed in order to allow time to evaluate the FESOP application. As soon as the FESOP is issued, KleenSoil International, Inc. will withdraw the Title V application.**

**It is our understanding that Title V emissions fees have been paid through 1995 by Anderson Columbia Thermal Systems, Inc.**

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

**Facility Location and Type**

1. Facility UTM Coordinates: <b>Mobile Unit</b> Zone: _____ East (km): _____ North (km): _____			
2. Facility Latitude/Longitude: <b>Mobile Unit</b> Latitude (DD/MM/SS): _____ Longitude (DD/MM/SS): _____			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>16</b>	6. Facility SIC(s): <b>1622</b>
7. Facility Comment (limit to 500 characters):  <b>This mobile unit is permitted to operate in all counties in the state of Florida except for Hernando and Okaloosa Counties where KleenSoil International, Incorporated does not plan on operating the portable soil thermal treatment unit.</b>			

**Facility Contact**

1. Name and Title of Facility Contact: <b>Trevor Cook, Vice President</b>	
2. Facility Contact Mailing Address: Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>	
3. Facility Contact Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>	



**B. FACILITY REGULATIONS**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

A large, empty rectangular box with a thin black border, occupying the central portion of the page. It is intended for the user to provide a Rule Applicability Analysis for Category II and III applications involving non Title-V sources.



**C. FACILITY POLLUTANTS**

**Facility Pollutant Information**

1. Pollutant Emitted	2. Pollutant Classification
H017	A



**D. FACILITY POLLUTANT DETAIL INFORMATION**

(NA)

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:
2. Requested Emissions Cap: _____ (lb/hour) _____ (tons/year)
3. Basis for Emissions Cap Code:
4. Facility Pollutant Comment (limit to 400 characters):  <p style="text-align: center;"><b>All pollutants are reported in the emissions unit information section.</b></p>

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:
2. Requested Emissions Cap: _____ (lb/hour) _____ (tons/year)
3. Basis for Emissions Cap Code:
4. Facility Pollutant Comment (limit to 400 characters):

**E. FACILITY SUPPLEMENTAL INFORMATION**

**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 checked="" type="checkbox"/> Attached, Document ID: <u>001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI:  <input type="checkbox"/> Attached, Document ID: _____  <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed  <input checked="" type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached,  Document ID: _____</p> <p><input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>15. Compliance Certification (Hard-copy Required):  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[ X ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[ X ] This Emissions Unit Information Section addresses, as a single emissions unit, a 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.

**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  <b>Mobile Soil Thermal Treatment Unit</b>		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ <b>X</b> ] Unknown		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ ] Yes [ <b>X</b> ] No	5. Emissions Unit Major Group SIC Code: <b>16</b>
6. Emissions Unit Comment (limit to 500 characters):  <b>Emissions unit consists of a 35 TPH mobile soil thermal treatment unit with air pollution controlled by a baghouse and an afterburner. Major components of the emissions unit are a contaminated soil feed bin, bin to dryer belt conveyor, dryer, generator, baghouse, and an afterburner.</b>		

**Emissions Unit Control Equipment**

**A.**

1. Description (limit to 200 characters):  <b>Fabric Filter-High Temperature (T&gt;250F)</b>  <b>Baghouse</b>
2. Control Device or Method Code: <b>016</b>

**B.**

1. Description (limit to 200 characters):  <b>Direct-Flame Afterburner</b>
2. Control Device or Method Code: <b>019</b>

**C.**

1. Description (limit to 200 characters):
2. Control Device or Method Code:

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Details**

1. Initial Startup Date: NA
2. Long-term Reserve Shutdown Date: NA
3. Package Unit: <b>Mobile Thermal Treatment Unit</b> Manufacturer: <b>Industrial Waste, Inc.</b> Model Number:
4. Generator Nameplate Rating: <b>0.20 MW</b>
5. Incinerator Information: Dwell Temperature: <b>1600 °F</b> Dwell Time: <b>1.0</b> seconds Incinerator Afterburner Temperature: <b>1600 °F</b>

**Emissions Unit Operating Capacity**

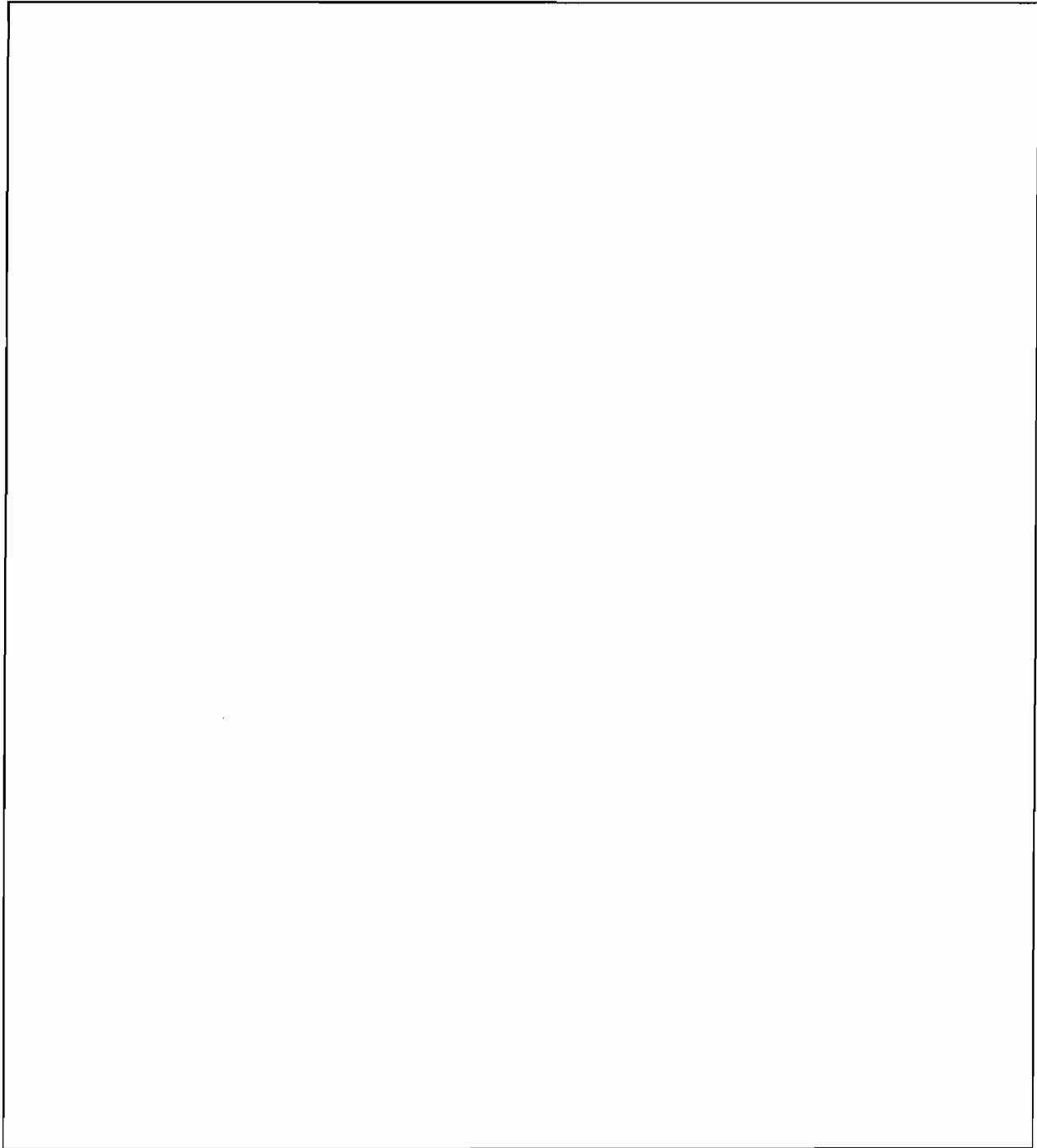
1. Maximum Heat Input Rate: <b>23mmBtu/hr to kiln / 22 mmBtu/hr to afterburner / 1.8 mmBtu/hr to generator</b>
2. Maximum Incineration Rate:                      lb/hr                      tons/day
3. Maximum Process or Throughput Rate: <b>35.0 tons per hour contaminated soil / 306,600 tons per year contaminated soil</b>
4. Maximum Production Rate: NA
5. Operating Capacity Comment (limit to 200 characters):

**Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:		
	<b>24 hours/day</b>	<b>7 days/week</b>
	<b>52 weeks/year</b>	<b>8,760 hours/year</b>

**D. EMISSIONS UNIT REGULATIONS**  
**(Regulated Emissions Units Only)**  
**(NA)**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)







**E. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

<p>1. Identification of Point on Plot Plan or Flow Diagram: <b>Attachment 001-Final Exhaust</b></p>
<p>2. Emission Point Type Code:  <input type="checkbox"/> 1            <input type="checkbox"/> 2            <input checked="" type="checkbox"/> 3            <input type="checkbox"/> 4</p>
<p>3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>NA</b></p>
<p>4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>NA</b></p>
<p>5. Discharge Type Code:  <input type="checkbox"/> D            <input type="checkbox"/> F            <input type="checkbox"/> H            <input type="checkbox"/> P  <input type="checkbox"/> R            <input checked="" type="checkbox"/> V            <input type="checkbox"/> W</p>
<p>6. Stack Height: <b>30</b> feet</p>
<p>7. Exit Diameter: <b>3.0</b> feet</p>
<p>8. Exit Temperature: <b>1600</b> °F</p>

**Emissions Unit Information Section 1 of 1**

9. Actual Volumetric Flow Rate: <b>36,077</b> acfm
10. Percent Water Vapor : <b>25 %</b>
11. Maximum Dry Standard Flow Rate: <b>21,583</b> dscfm
12. Nonstack Emission Point Height: <b>NA</b> feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):
14. Emission Point Comment (limit to 200 characters):  <b>Maximum dry standard flow rate is based on back-calculating from PM emission limit.</b>  $7.4 \text{ lbs/hr} / 0.04 \text{ gdscf} \times 7,000 \text{ grains/lb} / 60 \text{ min/hr} = \mathbf{21,583 \text{ dscfm}}$

**F. SEGMENT (PROCESS/FUEL) INFORMATION**  
**(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment (  1  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>Solid Waste Disposal/Industrial/Incineration/Single Chamber (Petroleum Contaminated Soil)</b>	
2. Source Classification Code (SCC): <b>5-03-001-02</b>	
3. SCC Units: <b>Tons Burned</b>	
4. Maximum Hourly Rate: <b>35.0 tons burned per hour</b>	5. Maximum Annual Rate: <b>306,600 tons burned per year</b>
6. Estimated Annual Activity Factor: <b>N/A</b>	
7. Maximum Percent Sulfur: <b>N/A</b>	8. Maximum Percent Ash: <b>N/A</b>
9. Million Btu per SCC Unit: <b>N/A</b>	
10. Segment Comment:	

**Segment Description and Rate:** (  2  of  4  )

<p>1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):   <b>In-Process Fuel: Liquefied Petroleum (Propane)</b></p>	
<p>2. Source Classification Code (SCC): <b>3-90-010-89</b></p>	
<p>3. SCC Units: <b>1000 Gallons Burned</b></p>	
<p>4. Maximum Hourly Rate: <b>0.500 Thousand Gallons Burned</b></p>	<p>5. Maximum Annual Rate: <b>4,380.0 Thousand Gallons Burned</b></p>
<p>6. Estimated Annual Activity Factor: <b>NA</b></p>	
<p>7. Maximum Percent Sulfur: <b>NA</b></p>	<p>8. Maximum Percent Ash: <b>NA</b></p>
<p>9. Million Btu per SCC Unit: <b>90.5</b></p>	
<p>10. Segment Comment: <b>NA</b></p>	

**Segment Description and Rate:** (  3  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Distillate Oil (# 2 Diesel)</b>	
2. Source Classification Code (SCC): <b>3-90-005-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.3432 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>3006.43 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>0.3</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>141.0</b>	
10. Segment Comment:	

**Segment Description and Rate: ( 4 of 4 )**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Natural Gas</b>	
2. Source Classification Code (SCC): <b>3-90-006-89</b>	
3. SCC Units: <b>1 Million Cubic Feet Burned</b>	
4. Maximum Hourly Rate: <b>0.045 Million Cubic Feet Burned</b>	5. Maximum Annual Rate: <b>394.2 Million Cubic Feet Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>NA</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>1000</b>	
10. Segment Comment: <b>NA</b>	





**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**  1  of  5

1. Pollutant Emitted: <b>PM</b>		
2. Total Percent Efficiency of Control: <b>98 %</b>		
3. Potential Emissions:	<b>7.4 lb/hour</b>	<b>32.4 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>7.4 lb/hr and 32.4 tons/yr</b> Reference: <b>AC16-187650A, SC No. 11</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters): <b>NA</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Emissions Unit Information Section  1  of  1**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>7.4 lb/hour</b>	<b>32.4 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 5</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>Rule Basis: 62-296.415(2)(a), F.A.C.</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  2  of  5

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control:	<b>NA</b>	%
3. Potential Emissions:	<b>9.42 lb/hour</b>	<b>41.2 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>100 ppm CO/ft<sup>3</sup> gas x (28/385) lb CO/ft<sup>3</sup> for Dryer and Afterburner</b> Reference: <b>Rule 62-296.415(1)(b)</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  21,583 dscfm x (100x10 <sup>-6</sup> ) CO/ft <sup>3</sup> x (28/385) lb CO/ft <sup>3</sup> x 60 min/hr = <b>9.42 lbs/hr</b>  9.42 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>41.25 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>9.42 lb/hour</b>	<b>41.2 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>62-297.500, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1  of  1

**Pollutant Detail Information:**  3  of  5

1. Pollutant Emitted: <b>VOC</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>9.42 lb/hour</b>	<b>61.3 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>20,000 PPM VOC</b> Reference: <b>Based on material balance analysis</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  35 tons/hr soil x 2,000 lbs/ton x 20,000 ppm VOC/1,000,000 x (1-.99) = <b>14.0 lbs/hr</b>  14.0 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>61.32 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>14.0 lb/hour</b>	<b>61.3 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>62-297.410, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>AC16-187650A</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1  of  1

**Pollutant Detail Information:**  4  of  5

1. Pollutant Emitted: <b>SO2</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		%
3. Potential Emissions:	<b>15.4 lb/hour</b>	<b>67.6 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>(0.003 x 2) lb/SO<sub>2</sub>/lb fuel</b> Reference: <b>Stoichiometry</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  343.2 gal/hr x 7.5 lb/gal x (0.003 x 2) lb/SO <sub>2</sub> lb fuel = <b>15.4 lb/hr</b>  15.4 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>67.6 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>15.4 lb/hour</b>	<b>67.6 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Certified Fuel Analysis</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>AC16-187650A</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		



Emissions Unit Information Section  1  of  1

**Pollutant Detail Information:**  5  of  5

1. Pollutant Emitted: <b>H017 (Benzene)</b>		
2. Total Percent Efficiency of Control:      %		
3. Potential Emissions:	<b>2.28 lb/hour</b>	<b>10.0 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>2.28 lb/hr and 10.0 tons/yr</b> Reference: <b>AC16-187650A, SC No. 5</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters): <b>NA</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

Emissions Unit Information Section  1  of  1

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>2.28 lb/hour</b>	<b>10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>NA</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>Basis: AC16-187650A</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitation:** Visible Emissions Limitation  1  of  1

1. Visible Emissions Subtype: <b>VE5</b>
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <b>5 %</b> Exceptional Conditions: <b>5 %</b> Maximum Period of Excess Opacity Allowed: <b>0 min/hour</b>
4. Method of Compliance: <b>EPA Method 9 (30-minutes, @ exhaust of afterburner)</b>
5. Visible Emissions Comment (limit to 200 characters):  <p align="center"><b>Basis: 62-296.415</b></p> <p align="center"><b>This opacity limitation applies to the final exhaust stack</b></p>

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: _____ %      Exceptional Conditions: _____ % Maximum Period of Excess Opacity Allowed: _____ min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):



**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section  1  of  1

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
SO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
NO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
4. Baseline Emissions:			
PM	0 lb/hour	0 tons/year	
SO2	0 lb/hour	0 tons/year	
NO2		0 tons/year	
5. PSD Comment (limit to 200 characters):			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements for All Applications**

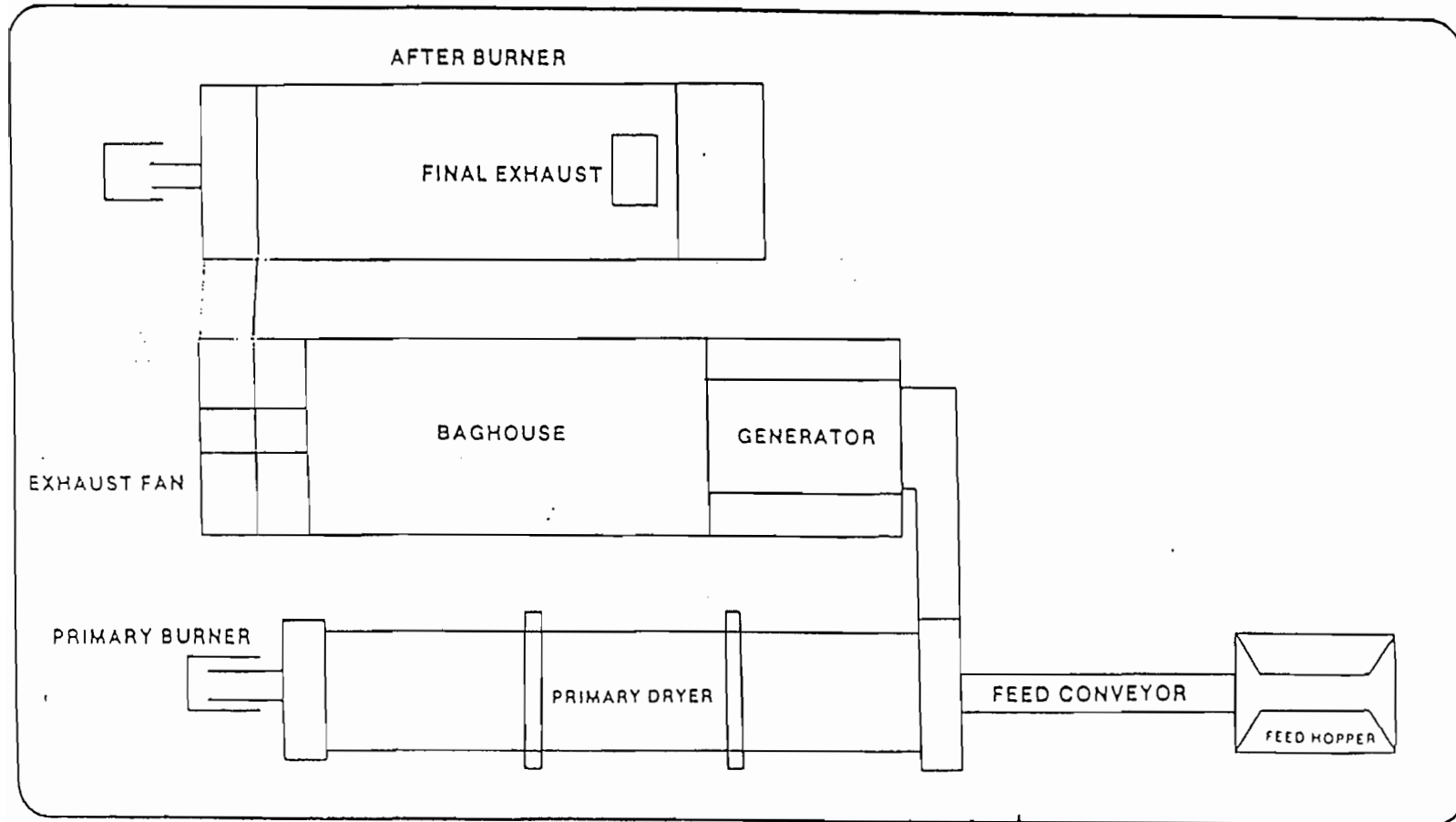
<p>1. Process Flow Diagram  <input checked="" type="checkbox"/> Attached, Document ID: <u>001</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</p>
<p>2. Fuel Analysis or Specification  <input checked="" type="checkbox"/> Attached, Document ID: <u>003</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</p>
<p>3. Detailed Description of Control Equipment  <input checked="" type="checkbox"/> Attached, Document ID: <u>004</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</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</p>
<p>5. Compliance Test Report  <input type="checkbox"/> Attached, Document ID: _____   <input type="checkbox"/> Previously submitted, Date: _____   <input checked="" 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. Supplemental Information for Construction Permit Application  <input type="checkbox"/> Attached, Document ID: _____    <input checked="" type="checkbox"/> Not Applicable</p>
<p>9. Other Information Required by Rule or Statute  <input type="checkbox"/> Attached, Document ID: _____    <input checked="" type="checkbox"/> Not Applicable</p>

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required)  <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____  <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____  <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____  <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____  <input checked="" type="checkbox"/> Not Applicable



# MOBILE THERMAL TREATMENT UNIT



**Attachment 002**  
**SECTION II: FACILITY INFORMATION**  
**PART D: FACILITY SUPPLEMENTAL INFORMATION**

**QUESTION 4: Precautions to Prevent Emissions of Unconfined Particulate Matter**

The handling of the processed soil and vehicle traffic will likely be the most significant sources of unconfined particulate matter emissions.

- The control of unconfined particulate matter emissions from processed soil will be controlled by water spray as necessary.
- The control of emissions resulting from vehicle movement will be controlled, as necessary, by the application of a chemical dust suppressant or water.

**QUESTION 5: FUGITIVE EMISSIONS IDENTIFICATION**

The generation of fugitive particulate matter emissions during the handling of contaminated soil is expected to be minimal; primarily because of the inherent moisture content of this material. If fugitive emissions do become a problem during the handling of contaminated soil (during the receiving, storage, or transfer to the processing plant), these emissions will be controlled by water sprays.

Attachment 003

**Fuel Specifications:**

Kleen Soil International, Incorporated requests permission to use virgin No. 2 fuel oil, natural gas or propane for the kiln and afterburner and No. 2 fuel oil for the generator.

The fuels will be fired singularly to the kiln and afterburner. It is possible that one fuel might be fired to the kiln while a different type of fuel is fired to the afterburner. It is not proposed, however, that a mixture of two or more fuels will be fired co-currently to either the kiln or the afterburner. If the blending and co-firing of fuels does appear feasible in the future, an amendment to the permit will be requested.

FUEL ANALYSIS

	Natural Gas	No. 2 Fuel Oil	Propane
Percent Sulfur	Nil	0.30	Nil
Percent Ash	Nil	Nil	Nil
Percent Nitrogen	Nil	Nil	Nil
Density (lb/gal)	1 lb/23.8 ft <sup>3</sup>	7.5	5.0
Heat Capacity (BTU/gal)	1,050 SCF	141,000	90,500
Other Contaminants	None	None	None

**Attachment 004**

**Detailed Description of Control Equipment:**

**Baghouse:**

Max No. Bags: 420 Nomex Bags; 8" diameter and 10' long  
Media Area: 2931 sq. ft.  
Total Filter CFM: 36,077 acfm  
Air to Cloth Ratio: 12.3 to 1  
Control Efficiency: 98.4%

**Afterburner:**

Control Efficiency: 99%  
Dwell Temperature: 1600 °F  
Dwell Time: 1.0 second  
Incinerator Afterburner Temperature : 1600 °F  
Stack Ht: 30.0 ft  
Stack Diameter: 3.0 ft<sup>2</sup>



# Department of Environmental Protection

## DIVISION OF AIR RESOURCES MANAGEMENT APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

### I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) 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

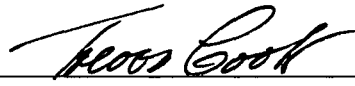
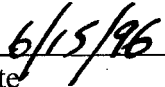
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: <b>KleenSoil International, Incorporated</b>	
2. Site Name: <b>Mobile Soil Remediation Unit #1</b>	
3. Facility Identification Number: <span style="float: right;"><input checked="" type="checkbox"/> Unknown</span>	
4. Facility Location: <b>(Mobile Unit)</b> Street Address or Other Locator: City: County: Zip Code:	
5. Relocatable Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	7770029-002-AF
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Trevor Cook, Vice President</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address:  Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>
4. Owner/Authorized Representative or Responsible Official Statement:  <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained 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

\* 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.

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>
001	Mobile Thermal Soil Remediation Plant with a Generator, Baghouse and Afterburner	AF2A

**Purpose of Application and Category**

Check one (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
- Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

- Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit to be revised: \_\_\_\_\_

- Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: \_\_\_\_\_

- Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

\_\_\_\_\_



**Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): \_\_\_\_\_

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: AO16-231440

Reason for revision: ESCAPE TITLE V WITH A FESOP

**Category III: All Air Construction Permit Applications for All Facilities and Emissions Units**

This Application for Air Permit is submitted to obtain:

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: \_\_\_\_\_

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): \_\_\_\_\_

- Air construction permit for one or more existing, but unpermitted, emissions units.

**Application Processing Fee**

Check one:

[ ] Attached - Amount: \$ \_\_\_\_\_

[ X ] Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations: <b>NA</b>
2. Projected or Actual Date of Commencement of Construction: <b>NA</b>
3. Projected Date of Completion of Construction: <b>NA</b>

**Professional Engineer Certification**

1. Professional Engineer Name: <b>John B. Koogler, Ph.D., P.E.</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

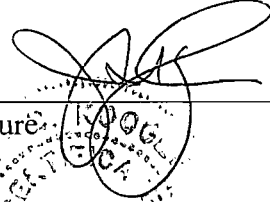
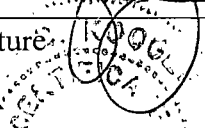
*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(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.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*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  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.*

Signature:   
(seal): 

Date: 6/11/96

\* Attach any exception to certification statement.

**Application Contact**

1. Name and Title of Application Contact:  <b>Mark Hagmann-Project Engineer</b>
2. Application Contact Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>Florida</b> Zip Code: <b>32609</b>
3. Application Contact Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>

**Application Comment**

**This application is a request for a FESOP.**

**KleenSoil International, Inc. will curtail operations in order to escape Title V applicability. The HAP emissions will be below 10 tpy for any individual HAP and 25 tpy for total HAPs.**

**No fees are associated with this request because the facility is still currently subject to Title V.**

**This FESOP application is being jointly submitted with a Title V application. We are requesting the evaluation of the Title V application be delayed in order to allow time to evaluate the FESOP application. As soon as the FESOP is issued, KleenSoil International, Inc. will withdraw the Title V application.**

**It is our understanding that Title V emissions fees have been paid through 1995 by Anderson Columbia Thermal Systems, Inc.**

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: <b>Mobile Unit</b> Zone: _____ East (km): _____ North (km): _____			
2. Facility Latitude/Longitude: <b>Mobile Unit</b> Latitude (DD/MM/SS): _____ Longitude (DD/MM/SS): _____			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>16</b>	6. Facility SIC(s): <b>1622</b>
7. Facility Comment (limit to 500 characters):  <b>This mobile unit is permitted to operate in all counties in the state of Florida except for Hernando and Okaloosa Counties where KleenSoil International, Incorporated does not plan on operating the portable soil thermal treatment unit.</b>			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Trevor Cook, Vice President</b>	
2. Facility Contact Mailing Address: Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>	
3. Facility Contact Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>	

**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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Synthetic Non-Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Major Source of Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8. One or More Emissions Units Subject to NSPS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. One or More Emission Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Facility Regulatory Classifications Comment (limit to 200 characters):  <b>This facility will no longer be classified as a Title V source once HAPs are limited below the applicable Title V threshold.</b>

**B. FACILITY REGULATIONS**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

**FDEP Core List**





**C. FACILITY POLLUTANTS**

**Facility Pollutant Information**

*subject to limitation  
at an emission  
unit*

*A major  
B - regulated  
(non-major or SM)*

1. Pollutant Emitted	2. Pollutant Classification
VOC	SM <sup>ind</sup>
HAPS	SM
CO	
SO <sub>2</sub>	
PM	

**D. FACILITY POLLUTANT DETAIL INFORMATION**  
**(NA)**

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		
<b>All pollutants are reported in the emissions unit information section.</b>		

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

## E. FACILITY SUPPLEMENTAL INFORMATION

### 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 checked="" type="checkbox"/> Attached, Document ID: <u>001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable

### Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI:  <input type="checkbox"/> Attached, Document ID:_____
<input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed
<input checked="" type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached,  Document ID: _____</p> <p><input type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>15. Compliance Certification (Hard-copy Required):  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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 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.

**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  <b>Mobile Soil Thermal Treatment Unit</b>		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ <b>X</b> ] Unknown		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ ] Yes [ <b>X</b> ] No	5. Emissions Unit Major Group SIC Code: <b>16</b> <span style="float: right;">49</span>
6. Emissions Unit Comment (limit to 500 characters):  <b>Emissions unit consists of a 35 TPH mobile soil thermal treatment unit with air pollution controlled by a baghouse and an afterburner. Major components of the emissions unit are a contaminated soil feed bin, bin to dryer belt conveyor, dryer, generator, baghouse, and an afterburner.</b>  <b>HAPs are below Title V threshold based on FDEP MEMO, dated August 3, 1995, from C. H. Fancy (Subject: Methods of Determining/Quantifying HAPs). See Attachment 005.</b>		

**Emissions Unit Control Equipment**

**A.**

1. Description (limit to 200 characters):  <b>Fabric Filter-High Temperature (T&gt;250F)</b>  <b>Baghouse</b>
2. Control Device or Method Code: <b>016</b> ✓

**B.**

1. Description (limit to 200 characters):  <b>Direct-Flame Afterburner</b>
2. Control Device or Method Code: <del>019</del> 21

**C.**

1. Description (limit to 200 characters):
2. Control Device or Method Code:





**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

**FDEP Core List**

A large empty rectangular box with a black border, occupying most of the page below the 'FDEP Core List' heading. It is currently blank, indicating that the user is to provide the core list information within this area.



**E. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

<p>1. Identification of Point on Plot Plan or Flow Diagram: <b>Attachment 001-Final Exhaust</b></p>
<p>2. Emission Point Type Code:  <input checked="" type="checkbox"/> 1            <input type="checkbox"/> 2            <input checked="" type="checkbox"/> 3            <input type="checkbox"/> 4</p>
<p>3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>NA</b></p>
<p>4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>NA</b></p>
<p>5. Discharge Type Code:  <input type="checkbox"/> D            <input type="checkbox"/> F            <input type="checkbox"/> H            <input type="checkbox"/> P  <input type="checkbox"/> R            <input checked="" type="checkbox"/> V            <input type="checkbox"/> W</p>
<p>6. Stack Height: <b>30</b> feet</p>
<p>7. Exit Diameter: <b>3.0</b> feet</p>
<p>8. Exit Temperature: <b>1500</b> °F</p>

9. Actual Volumetric Flow Rate: <b>34,325 acfm</b>		
10. Percent Water Vapor : <b>25 %</b>		
11. Maximum Dry Standard Flow Rate: <b>21,583 dscfm</b>		<i>68°F std P</i>
12. Nonstack Emission Point Height: <b>NA</b>		feet
13. Emission Point UTM Coordinates: Zone: East (km): <i>OPTIONAL</i> North (km):		
14. Emission Point Comment (limit to 200 characters):  <b>Maximum dry standard flow rate is based on back-calculating from PM emission limit.</b>  $7.4 \text{ lbs/hr} / 0.04 \text{ gdscf} \times 7,000 \text{ grains/lb} / 60 \text{ min/hr} = \mathbf{21,583 \text{ dscfm}}$  <i>p. 30</i>  $\frac{\frac{\text{lb}}{\text{hr}}}{\frac{\text{g}}{\text{ft}^3}} \quad \frac{\frac{\text{g}}{\text{lb}}}{\frac{\text{min}}{\text{hr}}}$		

**F. SEGMENT (PROCESS/FUEL) INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment (  1  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>Solid Waste Disposal/Industrial/Incineration/Single Chamber (Petroleum Contaminated Soil)</b>	
2. Source Classification Code (SCC): <b>5-03-001-02</b> ✓	
3. SCC Units: <b>Tons Burned</b> ✓	
4. Maximum Hourly Rate: <b>35.0 tons burned per hour</b>	5. Maximum Annual Rate: <b>306,600 tons burned per year</b>
6. Estimated Annual Activity Factor: <b>N/A</b>	
7. Maximum Percent Sulfur: <b>N/A</b>	8. Maximum Percent Ash: <b>N/A</b>
9. Million Btu per SCC Unit: <b>N/A</b>	
10. Segment Comment:	

**Segment Description and Rate:** ( 2 of 4 )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): <b>In-Process Fuel: Liquefied Petroleum (Propane)</b>	
2. Source Classification Code (SCC): <b>3-90-010-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.497 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>4,355.8 Thousand Gallons Burned</b> ✓
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>NA</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>90.5</b>	
10. Segment Comment: <b>NA</b>	

$$\frac{45 \frac{\text{MMBtu}}{\text{hr}}}{90.5 \frac{\text{MMBtu}}{1000 \text{ gal}}} = 0.497 \frac{1000 \text{ gal propane}}{\text{hr}}$$

$$\frac{1.06}{14} = 0.013 \frac{1000 \text{ gal NO}_2}{\text{hr}} = 115.6 \frac{1000 \text{ gal}}{\text{yr}}$$

$$\frac{90.5 \text{ MMBtu}}{1000 \text{ gal}} = \frac{90.5 \text{ MMBtu}}{\text{gal}}$$

**Segment Description and Rate: ( 3 of 4 )**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Distillate Oil (# 2 Diesel)</b>	
2. Source Classification Code (SCC): <b>3-90-005-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.332 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>2,911.4 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>***See Attachment 003***</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>141.0</b>	
10. Segment Comment:  $  \begin{array}{l}  p. 20 \\  \frac{46.86 \text{ MM Btu}}{141 \text{ MM gal}} = 0.332 \frac{\text{MM gal}}{\text{hr}} = 2,911.3 \frac{\text{MM gal}}{\text{yr}}  \end{array}  $	

**Segment Description and Rate: ( 4 of 4 )**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Natural Gas</b>	
2. Source Classification Code (SCC): <b>3-90-006-89</b>	
3. SCC Units: <b>1 Million Cubic Feet Burned</b>	
4. Maximum Hourly Rate: <b>0.045 Million Cubic Feet Burned</b>	5. Maximum Annual Rate: <b>394.2 Million Cubic Feet Burned</b> ✓
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>NA</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>1000</b>	
10. Segment Comment: <b>NA</b>  $\frac{45 \text{ MMTPY}}{\text{hr}} = \frac{0.045 \text{ MM SCF}}{\text{hr}}$ $\frac{1.86}{141} = 0.013 \frac{1000 \text{ gal}}{\text{hr}} = 115.6 \frac{1000 \text{ gal No.2}}{\text{hr}}$	



**G. EMISSIONS UNIT POLLUTANTS  
(Regulated and Unregulated Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device-Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018	NA	EL
PM10	018	NA	NS
NOX	NA	NA	NS
CO	NA	NA	EL
VOC	019	NA	EL
SO2	NA	NA	EL
H017 (Benzene)	019	NA	NS
H104 (Hexane)	019	NA	NS
H169 (Toluene)	019	NA	NS
H181 (Trimethylpentane)	019	NA	NS
H186 (Xylene)	019	NA	NS
HAPS	019	NA	<del>NS</del> EL
ethylbenzene? H085			
negatives?			

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
 (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

**Pollutant Detail Information:**  1  of  4

1. Pollutant Emitted: <b>PM</b>		
2. Total Percent Efficiency of Control: <b>98 %</b>		
3. Potential Emissions:	<b>7.98 lb/hour</b>	<b>34.9 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.04 grains/dscf</b> Reference: <b>Process Knowledge</b> <i>limit in Rule</i>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <i>based on allowance in rule</i> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Emissions from kiln/afterburner:</b> <span style="float: right;">13.95 ←</span> $(45 \text{ mm}^3/\text{hr}) / (.31 \text{ lb}^3/\text{mm}^3\text{hr})$ $21,583 \text{ dscfm} \times 0.04 \text{ gdscf} \times 1 \text{ lb}/7,000 \text{ grains} \times 60 \text{ min}/\text{hr} = 7.4 \text{ lbs}/\text{hr}$ <i>see p. 24</i> $7.4 \text{ lbs}/\text{hr} \times 8760 \text{ hrs}/\text{yr} \times \text{ton}/2000 \text{ lbs} = 32.4 \text{ tons}/\text{yr}$  <b>Generator:</b> $1.86 \text{ mmBtu}/\text{hr}$ from diesel fuel $\times$ $0.31 \text{ lb-PM}/\text{mmBtu}$ <i>AP-42?</i> = <b>0.58 lbs/hr</b> $0.58 \text{ lbs PM}/\text{hr} \times 8760 \text{ hrs}/2000 \text{ lbs} = 2.53 \text{ tons}/$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <del>NA</del> <i>0.04 gr/dscf</i>		
4. Equivalent Allowable Emissions:	<i>7.4 lb/hour</i>	<b>32.4 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 5</b> <i>62-296.415 62-204.800</i>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>Rule Basis: 62-296.415(2)(a), F.A.C.</b> <i>in facility</i> <b>There are no applicable emission standards for the generator. Therefore, the allowable emissions limit in Field 4 does not include emissions associated with the generator.</b> <i>Why not</i>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:** 2 of 4

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control: <b>NA</b>	%	
3. Potential Emissions:	<b>11.19 lb/hour</b>	<b>48.95 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>100 ppm CO/ft<sup>3</sup> gas x (28/385) lb CO/ft<sup>3</sup> for Dryer and Afterburner</b> Reference: <b>Rule 62-296.415(1)(b)</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<p><b>Emissions from kiln/afterburner:</b></p> <p>21,583 dscfm x 60 min/hr x (100x10<sup>-6</sup>) CO/ft<sup>3</sup> gas x (28/385) lb CO/ft<sup>3</sup> = 9.42 lbs/hr            9.42 lbs CO/hr x 8760 hrs/2000 lbs = <b>41.25 tons/yr</b></p> <p><i>Handwritten notes: 379, <math>\frac{n}{v} = \frac{p}{RT}</math>, <math>\frac{ft^3}{min} \times \frac{min}{hr} \times \left(\frac{1}{ft^3}\right) \times \left(\frac{lb}{ft^3}\right) =</math></i></p>		
<p><b>Generator:</b></p> <p>1.86 mmBtu/hr from diesel fuel x 0.95 lb CO/mmBtu = 1.77 lbs/hr            1.77 lbs CO/hr x 8760 hrs/2000 lbs = <b>7.7 tons/yr</b></p> <p style="text-align: right;"><i>EMISSION FRACTION</i></p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA <i>100 ppm</i>		
4. Equivalent Allowable Emissions:	9.42 lb/hour	41.2 tons/year
5. Method of Compliance (limit to 60 characters): <del>62-297.500, F.A.C.</del> <i>METHOD 10 62-204.000</i>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>Rule Basis: 62-296.415(1)(b)</b>  <b>There are no applicable emission standards for the generator. Therefore, the allowable emissions limit in Field 4 does not include emissions associated with the generator.</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  3  of  4

1. Pollutant Emitted: <b>VOC</b>	
2. Total Percent Efficiency of Control: <b>99 %</b>	
3. Potential Emissions:	<b>14.65 lb/hour</b> <b>64.2 tons/year</b> <i>X.11</i> <i>7.06</i> <i>HAPs</i>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year	
6. Emission Factor: <b>1,400 lb/hr VOC in Soil x Efficiency</b> Reference: <b>Based on material balance analysis</b>	
7. Emissions Method Code: <input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>(Afterburner destruction efficiency of 99% min.)</b>  <b>From soil:</b> <i>20,000 ppm VOC</i> <i>(35 tons-yr / 2000 lb / ton) (20,000 / 1000,000) = 1400 lb/hr</i> 1,400 lb/hr VOC in Soil x (1-.99) = <b>14.0 lbs/hr</b> 14.0 <sup>lbs</sup> tons/hr VOC x 8,760 hrs/yr / 2,000 lb/ton = <b>61.3 tons/yr</b>  <b>From generator:</b> <i>check</i> 1.86 mmBtu/hr from diesel fuel x 0.35 lb VOC/mmBtu = <b>0.65 lbs/hr</b> 0.65 lbs VOC/hr x 8760 hrs/2000 lbs = <b>2.85 tons/yr</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>This pollutant is synthetically limited based on limiting contaminant level in soil.</b>  <div style="text-align: right;"><i>20,000 ppm</i></div>	

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>14.0 lb/hour</b>	<b>61.3 tons/year</b>
5. Method of Compliance (limit to 60 characters): <del>62-297.410, F.A.C.</del> <i>401? 62-204 METHOD 25</i>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>AC16-187650A</b>  <b>There are no applicable emission standards for the generator. Therefore, the allowable emissions limit in Field 4 does not include emissions associated with the generator.</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:** 4 of 4

1. Pollutant Emitted: <b>SO2</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		%
3. Potential Emissions:	<b>15.4 lb/hour</b>	<b>67.6 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>(0.003 x 2) lb/SO<sub>2</sub>/lb fuel</b> Reference: <b>Stoichiometry</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<p><b>From Drum/Afterburner:</b> <span style="float: right;"><i>from p. 27 max 0.332 10W gal/hr #2</i></span></p> <p><i>1000</i>  <math>0.319 \text{ gal/hr} \times 7.5 \text{ lb/gal} \times (0.003 \times 2) \text{ lb/SO}_2 \text{ lb fuel} = 14.36 \text{ lb/hr}</math> <span style="float: right;"><i>14.94 lb/hr</i></span></p> <p><math>14.36 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 62.9 \text{ tons/yr}</math> <span style="float: right;"><i>65.44</i></span></p> <p style="text-align: right;"><i>2911.4 10000 gal/yr INMOC Gov.</i></p>		
<p><b>From Generator:</b></p> <p><math>1.86 \text{ mmBtu/hr from diesel fuel} \times 0.29 \text{ lb-SO}_2/\text{mmBtu} = 0.54 \text{ lbs/hr}</math></p> <p><math>0.54 \text{ lbs SO}_2/\text{hr} \times 8760 \text{ hrs}/2000 \text{ lbs} = 2.36 \text{ tons/yr}</math></p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		



**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA <i>0.3 % sulfur fuel</i>		
4. Equivalent Allowable Emissions:	15.4 lb/hour	67.6 tons/year
5. Method of Compliance (limit to 60 characters): <b>Certified Fuel Analysis</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>AC16-187650A</b>  <i>generator included ?</i>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitation:** Visible Emissions Limitation  1  of  1

1. Visible Emissions Subtype: <b>VE5</b>	
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <b>5 %</b> Exceptional Conditions: <b>5 %</b> Maximum Period of Excess Opacity Allowed: <b>0 min/hour</b>	
4. Method of Compliance: <b>EPA Method 9 (30-minutes, @ exhaust of afterburner)</b>	
5. Visible Emissions Comment (limit to 200 characters):  <p align="center"><b>Basis: 62-296.415(2)</b></p> <p align="center"><b>This opacity limitation applies to the final exhaust stack</b></p>	

*generat?*

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions:      %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System:** Continuous Monitor  1  of  1

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO</b>
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: <b>Thermal Environmental Instruments</b> Model Number: <b>48 (Thermo Electron)</b> Serial Number: <b>NA</b>	
5. Installation Date: <b>NA</b>	
6. Performance Specification Test Date: <b>NA</b>	
7. Continuous Monitor Comment (limit to 200 characters):	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number:      Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section  1  of  1

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
SO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
NO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
4. Baseline Emissions:			
PM		0 lb/hour	0 tons/year
SO2		0 lb/hour	0 tons/year
NO2			0 tons/year
5. PSD Comment (limit to 200 characters):			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

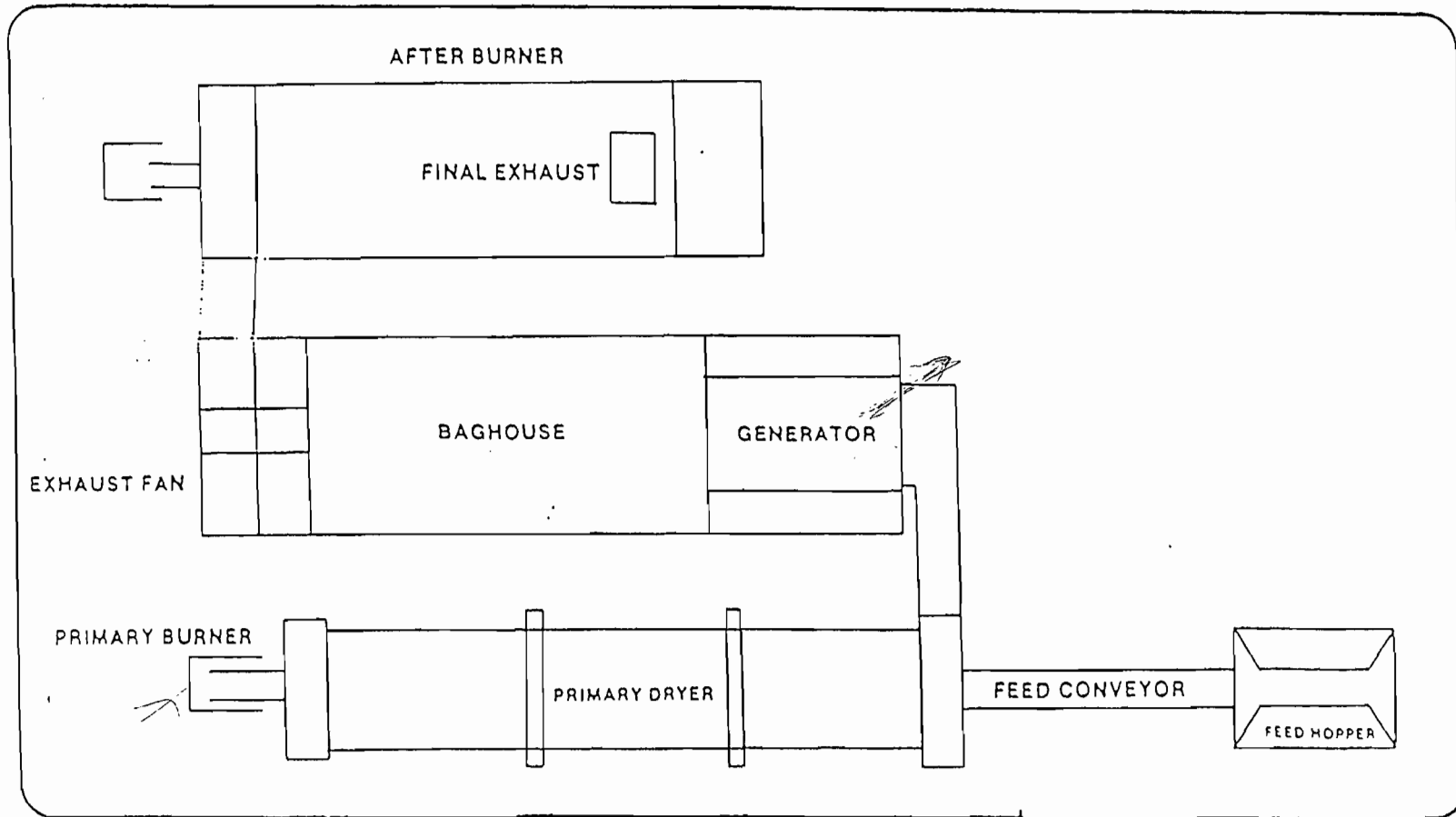
**Supplemental Requirements for All Applications**

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>003</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>004</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested <i>sample port close to ground?</i>
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____  <input type="checkbox"/> Previously submitted, Date: _____  <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <del>005-DEP MEMO</del> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required)  <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____  <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____  <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____  <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____  <input checked="" type="checkbox"/> Not Applicable

# MOBILE THERMAL TREATMENT UNIT





**Attachment 002**  
**SECTION II: FACILITY INFORMATION**  
**PART D: FACILITY SUPPLEMENTAL INFORMATION**

**QUESTION 4: Precautions to Prevent Emissions of Unconfined Particulate Matter**

The handling of the processed soil and vehicle traffic will likely be the most significant sources of unconfined particulate matter emissions.

- The control of unconfined particulate matter emissions from processed soil will be controlled by water spray as necessary.
- The control of emissions resulting from vehicle movement will be controlled, as necessary, by the application of a chemical dust suppressant or water.

**QUESTION 5: FUGITIVE EMISSIONS IDENTIFICATION**

The generation of fugitive particulate matter emissions during the handling of contaminated soil is expected to be minimal; primarily because of the inherent moisture content of this material. If fugitive emissions do become a problem during the handling of contaminated soil (during the receiving, storage, or transfer to the processing plant), these emissions will be controlled by water sprays.

Attachment 003

Fuel Specifications

KleenSoil International, Incorporated requests permission to use virgin No. 2 fuel oil, natural gas or propane for the kiln and afterburner and No. 2 fuel oil for the generator.

The fuels will be fired singularly to the kiln and afterburner. It is possible that one fuel might be fired to the kiln while a different type of fuel is fired to the afterburner. It is not proposed, however, that a mixture of two or more fuels will be fired co-currently to either the kiln or the afterburner. If the blending and co-firing of fuels does appear feasible in the future, an amendment to the permit will be requested.

During a 30-day rolling average the sulfur content will not exceed 0.3 percent. The maximum sulfur content requested is 0.75 percent.

To provide the Department with assurance that the sulfur content of the virgin No. 2 fuel oil will neither exceed 0.75% maximum nor 0.3% on a 30-day average, Kleen Soil International, Incorporated will require oil suppliers to provide certification of the sulfur content of each shipment of fuel and the quantity of fuel contained in each shipment, Kleen Soil International, Incorporated can maintain a running average of the sulfur content of the fuels used during each month, Kleen Soil International, Incorporated can assure itself and the Department that the 30-day average sulfur content of the fuel will not exceed 0.3%. The records of fuel deliveries and the running 30-day average fuel sulfur levels will be maintained and available for the Department's review, as required by applicable state regulations.

The record keeping will include records of individual shipments of fuel and cumulative quantities of fuel received during each calendar year and records of the monthly average sulfur contents of the virgin No. 2 diesel fuel. Additionally, Kleen Soil International, Incorporated will maintain records of fuel use during each day of plant operation and of the number of hours that the plant operates each day. These records will include the amount and type of fuel consumed.

FUEL ANALYSIS 

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	Natural Gas	No. 2 Fuel Oil	Propane
Percent Sulfur	Nil	0.30	Nil
Percent Ash	Nil	Nil	Nil
Percent Nitrogen	Nil	Nil	Nil
Density (lb/gal)	1 lb/23.8 ft <sup>3</sup>	7.5	5.0
Heat Capacity (BTU/gal)	1,000 SCF	141,000	90,500
Other Contaminants	None	None	None

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**Attachment 004**

**Detailed Description of Control Equipment**

**Baghouse:**

Max No. Bags: 420 Nomex Bags; 8" diameter and 10' long

Media Area: 2931 sq. ft.

Total Filter CFM: 34,325 acfm

Air to Cloth Ratio: 11.7 to 1

Control Efficiency: 98.4%

**Afterburner:**

Control Efficiency: 99%

Dwell Temperature: 1500 °F

Dwell Time: 1.0 second

Incinerator Afterburner Temperature : 1500 °F

Stack Ht: 30.0 ft

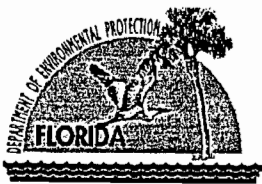
Stack Diameter: 3.0 ft

TABLE C-4. VAPOR PROFILE OF NORMAL GASOLINE

HAZARDOUS AIR POLLUTANT <sup>a</sup>	HAP TO VOC RATIO (percentage by weight)		
	MINIMUM	ARITHMETIC AVERAGE	MAXIMUM
Hexane	0.3	1.6	4.4
Benzene	0.2	0.9	2.2
Toluene	0.4	1.3	4.0
2,2,4 Trimethylpentane (iso-octane)	0.03	0.8	2.6
Xylenes	0.05	0.5	1.5
Ethylbenzene	0.03	0.1	0.5
<b>TOTAL HAPS<sup>b</sup></b>	<b>2.0</b>	<b>4.8</b>	<b>11.0</b>

<sup>a</sup> Cumene and naphthalene were also identified in some of the data points in small quantities. They are not shown as their addition does not significantly change the analysis.

<sup>b</sup> The total HAP ratios shown in the table are not simply sums of the individual HAPs. Total HAPs were calculated for each individual sample in the data base and the values represented in the table reflect the maximum, minimum, and arithmetic average total HAPs of these samples.



# Department of Environmental Protection

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BUREAU OF  
AIR REGULATION

## DIVISION OF AIR RESOURCES MANAGEMENT

### APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) 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


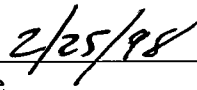
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: <b>KleenSoil International, Incorporated</b>	
2. Site Name: <b>Mobile Soil Remediation Unit #1</b>	
3. Facility Identification Number: <b>7770029</b> [ ] Unknown	
4. Facility Location: <b>(Mobile Unit)</b> 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:	<i>2/26/98</i>
2. Permit Number:	<i>7770029-002-AF</i>
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Owner/Authorized Representative or Responsible Official**

1. Name and Title of Owner/Authorized Representative or Responsible Official: <b>Trevor Cook, Vice President</b>
2. Owner/Authorized Representative or Responsible Official Mailing Address:  Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>
4. Owner/Authorized Representative or Responsible Official Statement:  <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained 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

\* Attach letter of authorization if not currently on file.



**Purpose of Application and Category**

Check one (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.**

This Application for Air Permit is submitted to obtain:

Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: \_\_\_\_\_

Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit to be revised: \_\_\_\_\_

Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: \_\_\_\_\_

Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_



**Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.**

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): AO16-231440

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: \_\_\_\_\_

- Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

**Category III: All Air Construction Permit Applications for All Facilities and Emissions Units**

This Application for Air Permit is submitted to obtain:

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: \_\_\_\_\_

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): \_\_\_\_\_

- Air construction permit for one or more existing, but unpermitted, emissions units.

**Application Processing Fee**

Check one:

Attached - Amount: \$ \_\_\_\_\_  Not Applicable.

**Construction/Modification Information**

1. Description of Proposed Project or Alterations: <b>NA</b>
2. Projected or Actual Date of Commencement of Construction: <b>NA</b>
3. Projected Date of Completion of Construction: <b>NA</b>

**Professional Engineer Certification**

1. Professional Engineer Name: <b>John B. Koogler, Ph.D., P.E.</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address:  Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 N.W. 13th Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers: Telephone: <b>(352) 377-5822</b> Fax: <b>(352) 377-7158</b>

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

*(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*

*(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.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [ ] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*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 [ ] 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.*

Signature

Date

2/23/98

\* Attach any exception to certification statement.



## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: <b>Mobile Unit</b> Zone: East (km): North (km):			
2. Facility Latitude/Longitude: <b>Mobile Unit</b> Latitude (DD/MM/SS): Longitude (DD/MM/SS):			
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4953</b>
7. Facility Comment (limit to 500 characters):  <b>This mobile unit is permitted to operate in all counties in the state of Florida except for Hernando and Okaloosa Counties where KleenSoil International, Incorporated does not plan on operating the portable soil thermal treatment unit.</b>			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Trevor Cook, Vice President</b>		
2. Facility Contact Mailing Address: Organization/Firm: <b>KleenSoil International, Incorporated</b> Street Address: <b>13838 Harlee Road</b> City: <b>Palmetto</b> State: <b>Florida</b> Zip Code: <b>34221</b>		
3. Facility Contact Telephone Numbers: Telephone: <b>(941) 723-1600</b> Fax: <b>(941) 772-7743</b>		

**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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Synthetic Non-Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Major Source of Hazardous Air Pollutants (HAPs)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8. One or More Emissions Units Subject to NSPS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
9. One or More Emission Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Facility Regulatory Classifications Comment (limit to 200 characters):  <b>This facility will no longer be classified as a Title V source once HAPs are limited below the applicable Title V threshold.</b>

## B. FACILITY REGULATIONS

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

### **RULE APPLICABILITY:**

**Rule 62-4 , F.A.C.**  
**Rule 62-204, F.A.C.**  
**Rule 62-210, F.A.C.**  
**Rule 62-212, F.A.C.**  
**Rule 62-775, F.A.C.**  
**Rule 62-296, F.A.C.**  
**Rule 62-297, F.A.C.**





### C. FACILITY POLLUTANTS

#### Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
PM	B
CO	B
SO2	B
VOC	SM
HAPS	SM
H015 (Arsenic)	SM
H017 (Benzene)	SM
H027 (Cadmium)	SM
H046 (Chromium)	SM
H085 (Ethylbenzene)	SM
H104 (Hexane)	SM
H114 (Mercury)	SM
H115 (Methyl Alcohol)	SM
H126 (Methyl t-butyl ether)	SM
H132 (Naphthalene)	SM
PB (Lead)	SM
H162 (Selenium)	SM
H169 (Toluene)	SM
H181 (2,2,4 Trimethylpentane)	SM
H186 (Xylene)	SM

**D. FACILITY POLLUTANT DETAIL INFORMATION**

**Facility Pollutant Detail Information:** Pollutant   1   of   1  

1. Pollutant Emitted: <b>HAPS</b>		
2. Requested Emissions Cap:	(lb/hour)	< 25 (tons/year)
3. Basis for Emissions Cap Code: <b>ESCTV</b>		
4. Facility Pollutant Comment (limit to 400 characters):		

**Facility Pollutant Detail Information:** Pollutant \_\_\_\_\_ of \_\_\_\_\_

1. Pollutant Emitted:		
2. Requested Emissions Cap:	(lb/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment (limit to 400 characters):		

## E. FACILITY SUPPLEMENTAL INFORMATION

### 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 checked="" type="checkbox"/> Attached, Document ID: <u>001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

### Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI:  <input type="checkbox"/> Attached, Document ID: _____  <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed  <input checked="" type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached,  Document ID: _____</p> <p><input checked="" type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>15. Compliance Certification (Hard-copy Required):  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>

### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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 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.

**B. GENERAL EMISSIONS UNIT INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  <b>Mobile Soil Thermal Treatment Unit</b>		
2. Emissions Unit Identification Number: <b>001</b> [ <input type="checkbox"/> ] No Corresponding ID [ <input type="checkbox"/> ] Unknown		
3. Emissions Unit Status Code: <b>A</b>	4. Acid Rain Unit? [ <input type="checkbox"/> ] Yes [ <input checked="" type="checkbox"/> ] No	5. Emissions Unit Major Group SIC Code: <b>49</b>
6. Emissions Unit Comment (limit to 500 characters):  <b>Emissions unit consists of a 35 TPH mobile soil thermal treatment unit with air pollution controlled by a baghouse and an afterburner. Major components of the emissions unit are a contaminated soil feed bin, bin to dryer belt conveyor, dryer, baghouse, and an afterburner.</b>  <b>HAPs are below Title V threshold based on FDEP MEMO, dated August 3, 1995, from C. H. Fancy (Subject: Methods of Determining/Quantifying HAPs) and Groundwater Monitoring Parameters and Pollution Sources-Third Edition. See Attachment 005.</b>		

**Emissions Unit Control Equipment**

**A.**

1. Description (limit to 200 characters):  <b>Fabric Filter-High Temperature (T&gt;250F)</b>  <b>Baghouse</b>
2. Control Device or Method Code: <b>016</b>

**B.**

1. Description (limit to 200 characters):  <b>Direct-Flame Afterburner</b>
2. Control Device or Method Code: <b>021</b>

**C.**

1. Description (limit to 200 characters):
2. Control Device or Method Code:





**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

**RULE APPLICABILITY:**

- Rule 62-4 , F.A.C.
- Rule 62-204, F.A.C.
- Rule 62-210, F.A.C.
- Rule 62-212, F.A.C.
- Rule 62-775, F.A.C.
- Rule 62-296.415, F.A.C.
- Rule 62-297, F.A.C.



**E. EMISSION POINT (STACK/VENT) INFORMATION**  
**(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>Attachment 001-Afterburner Stack</b>
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W
6. Stack Height: 30 feet
7. Exit Diameter: 3.0 feet
8. Exit Temperature: 1600 °F

Emissions Unit Information Section  1  of  2

9. Actual Volumetric Flow Rate: <b>59,820 acfm</b>		
10. Percent Water Vapor : <b>25 %</b>		
11. Maximum Dry Standard Flow Rate: <b>11,500 dscfm</b>		
12. Nonstack Emission Point Height: <b>NA</b>		feet
13. Emission Point UTM Coordinates:		
Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		
<p><b>Flow rate (acfm) is based on the maximum dry standard flow rate recorded during compliance testing. Please refer to Attachment 008 (Particulate Matter Emission Measurements-August 15, 1991)</b></p> <p><b>Flow Rate (acfm) = 11500 dscfm x (1600 + 460)F/(68 + 460)F / (1 - 0.25) = 59,820 acfm</b></p>		

**F. SEGMENT (PROCESS/FUEL) INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment (  1  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>Solid Waste Disposal/Industrial/Incineration/Single Chamber (Petroleum Contaminated Soil)</b>	
2. Source Classification Code (SCC): <b>5-03-001-02</b>	
3. SCC Units: <b>Tons Burned</b>	
4. Maximum Hourly Rate: <b>35.0 tons burned per hour</b>	5. Maximum Annual Rate: <b>214,000 tons burned per year</b>
6. Estimated Annual Activity Factor: <b>N/A</b>	
7. Maximum Percent Sulfur: <b>N/A</b>	8. Maximum Percent Ash: <b>N/A</b>
9. Million Btu per SCC Unit: <b>N/A</b>	
10. Segment Comment:  <b>Annual throughput is limited to escape Title V applicability by establishing Total HAPs below 25 tpy.</b>	

Segment Description and Rate: (  2  of  4  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Liquefied Petroleum (Propane)</b>	
2. Source Classification Code (SCC): <b>3-90-010-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.50 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>4,355.8 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>See Field 10</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>90.5</b>	
10. Segment Comment:  <b>The Gas Processors Association (GPA) provides product specifications for liquefied petroleum gases. Propane, as referenced in GPA Standard 2140-92, Figure 2-1, has a sulfur content of 185 ppmw.</b>  <b>AP-42 Version 5, Appendix A (A-5) states that the sulfur content in propane is negligible.</b>	

Segment Description and Rate: ( 3 of 4 )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Distillate Oil (# 2 Diesel)</b>	
2. Source Classification Code (SCC): <b>3-90-005-89</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.32 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>2,815.7 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>***See Attachment 003***</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>140.0</b>	
10. Segment Comment:	

**Segment Description and Rate: ( 4 of 4 )**

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):  <b>In-Process Fuel: Natural Gas</b>	
2. Source Classification Code (SCC): <b>3-90-006-89</b>	
3. SCC Units: <b>1 Million Cubic Feet Burned</b>	
4. Maximum Hourly Rate: <b>0.045 Million Cubic Feet Burned</b>	5. Maximum Annual Rate: <b>394.2 Million Cubic Feet Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>See Field 10</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>1000</b>	
10. Segment Comment:  <b>The Gas Processors Association (GPA) provides product specifications for natural gas. Natural gas, as referenced in GPA Standard 2140-92, Figure 2-1, has a sulfur content of 85 ppmw.</b>  <b>AP-42 Version 5, Appendix A (A-5) states that the sulfur content in natural gas is negligible.</b>	



**G. EMISSIONS UNIT POLLUTANTS  
(Regulated and Unregulated Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	016	NA	EL
PM10	016	NA	NS
CO	NA	NA	EL
SO2	NA	NA	EL
VOC	021	NA	EL
HAPS	021	NA	EL
H015 (Arsenic)	016	NA	EL
H017 (Benzene)	021	NA	EL
H027 (Cadmium)	016	NA	EL
H046 (Chromium)	016	NA	EL
H085 (Ethylbenzene)	021	NA	EL
H104 (Hexane)	021	NA	EL
H114 (Mercury)	NA	NA	EL
H115 (Methyl Alcohol)	021	NA	EL
H126 (Methyl t-butyl ether)	021	NA	EL
H132 (Naphthalene)	021	NA	EL
PB (Lead)	016	NA	EL
H162 (Selenium)	016	NA	EL
H169 (Toluene)	021	NA	EL
H181 (2,2,4 Trimethylpentane)	021	NA	EL
H186 (Xylene)	021	NA	EL

**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION  
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**  1  of  21

1. Pollutant Emitted: <b>PM</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>3.94 lb/hour</b>	<b>17.3 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.04 grains/dscf</b> Reference: <b>Rule 62-296.415(3), F.A.C.</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <p><b>Hourly:</b> 11,500 dscfm x 0.04 gr/dscf x 11b/7,000 grains x 60 min/hr = <b>3.94 lbs/hr</b>  <b>Annual:</b> 3.94 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>17.3 tons/yr</b></p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <p><b>PM is assumed to be all PM10.</b></p>		

Emissions Unit Information Section 1 of 2

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>0.04 grains/dscf</b>		
4. Equivalent Allowable Emissions:	<b>3.94 lb/hour</b>	<b>17.3 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 5</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>Rule Basis: 62-296.415(3), F.A.C.</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section 1 of 2

Pollutant Detail Information: 2 of 21

1. Pollutant Emitted: <b>PM10</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>3.94 lb/hour</b>	<b>17.3 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.04 grains/dscf</b> Reference: <b>Rule 62-296.415(3), F.A.C.</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 11,500 dscfm x 0.04 gdscf x 1lb/7,000 grains x 60 min/hr = <b>3.94 lbs/hr</b> <b>Annual:</b> 3.94 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>17.3 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>PM is assumed to be all PM10.</b>		

**Emissions Unit Information Section 1 of 2**

**Allowable Emissions** (Pollutant identified on front of page)

**A. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1 of 2

Pollutant Detail Information:  3 of 21

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		<b>%</b>
3. Potential Emissions:	<b>5.02 lb/hour</b>	<b>22.0 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>100 ppmvd</b> Reference: <b>Rule 62-296.415(1)(b)</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> $100 \text{ ppmvd} \times 11500 \text{ dscfm} \times 60 \text{ min/hr} \times 1 \text{ lbmole}/385 \text{ ft}^3 \times 28 \text{ lb/lbmole} = 5.02 \text{ lbs/hr}$ <b>Annual:</b> $5.02 \text{ lbs/hr} \times 8760 \text{ hrs}/2000 \text{ lbs} = 22.0 \text{ tons/yr}$		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Rule</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>100 ppmvd</b>		
4. Equivalent Allowable Emissions:	<b>5.02 lb/hour</b>	<b>22.0 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>EPA Method 10</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>Rule Basis: 62-296.415(1)(b)</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  4  of  21

1. Pollutant Emitted: <b>VOC</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>14.00 lb/hour</b>	<b>42.8 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>1,400 lbs/hr VOC in Soil and 5.8 lb VOC/mmcfb Natural Gas</b> Reference: <b>AC16-187650A S.C. #4 and AP-42 Version 5 Table 1.4-3</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters): <b>(Afterburner destruction efficiency of 99% min.)</b>  <b>From soil (AC16-187650A S.C. #4):</b> <b>Hourly:</b> 1,400 lb/hr VOC in Soil x (1-.99) = <b>14.0 lbs/hr</b> <b>Annual:</b> 1,400 lb/hr VOC in Soil / 35 tons soil/hr x 214,000 tons soil/year x (1-.99) / 2,000 lb/ton = <b>42.8 tons/yr</b>  <b>From natural gas usage in drum/afterburner (AP-42, Version 5 Table 1.4-3):</b>  <b>Hourly:</b> 0.045 mmcf burned/hr x 5.8 lb VOC/mmcfb burned x (1-.99) = <b>0.003 lbs/hr</b> <b>Annual:</b> 0.003 lbs/hr x 8,760 hrs/yr / 2,000 lb/ton = <b>0.01 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		



**Emissions Unit Information Section 1 of 2**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>14.00 lb/hour</b>	<b>42.8 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>AC16-187650A S.C. #4</b>		

**B. (NA)**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section 1 of 2

Pollutant Detail Information: 5 of 21

1. Pollutant Emitted: <b>SO2</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		<b>%</b>
3. Potential Emissions:	<b>13.87 lb/hour</b>	<b>60.7 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>(0.003 x 2) lb/SO<sub>2</sub>/lb fuel</b> Reference: <b>Stoichiometry</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 0.32 TGB #2 Diesel/hr x 7.2 lb/gal x (0.003 x 2) lb/SO <sub>2</sub> lb fuel = <b>13.87 lbs/hr</b> <b>Annual:</b> 13.87 lbs/hr x 8760 hrs/yr x ton/2000 lbs = <b>60.7 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		

**Allowable Emissions** (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: <b>Other</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>0.3% by wt. avg. sulfur in fuel</b>		
4. Equivalent Allowable Emissions:	<b>13.87 lb/hour</b>	<b>60.7 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Certified Fuel Analysis</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		
<b>AC16-187650A S.C. #10</b>		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  6  of  21

1. Pollutant Emitted: <b>HAPS</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>8.14 lb/hour</b>	<b>24.9 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

Emissions Unit Information Section  1  of  2

Allowable Emissions (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 25 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section 1 of 2

Pollutant Detail Information: 7 of 21

1. Pollutant Emitted: <b>H015 (Arsenic)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.01 lb/hour</b>	<b>0.02 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

Allowable Emissions (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1  of  2

**Pollutant Detail Information:**  8  of  21

1. Pollutant Emitted: <b>H017 (Benzene)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.70 lb/hour</b>	<b>2.1 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		



Emissions Unit Information Section  1  of  2

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  9  of  21

1. Pollutant Emitted: <b>H027 (Cadmium)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.03 lb/hour</b>	<b>0.08 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  10  of  21

1. Pollutant Emitted: <b>H046 (Chromium)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.04 lb/hour</b>	<b>0.11 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

Emissions Unit Information Section 1 of 2

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1 of 2

Pollutant Detail Information: 11 of 21

1. Pollutant Emitted: <b>H085 (Ethylbenzene)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.70 lb/hour</b>	<b>2.1 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

**Emissions Unit Information Section 1 of 2**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1  of  2

Pollutant Detail Information:  12  of  21

1. Pollutant Emitted: <b>H104 (Hexane)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.62 lb/hour</b>	<b>1.9 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		



Emissions Unit Information Section  1  of  2

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1  of  2

Pollutant Detail Information: 13 of 21

1. Pollutant Emitted: <b>H114 (Mercury)</b>		
2. Total Percent Efficiency of Control: %		
3. Potential Emissions:	<b>1.61 lb/hour</b>	<b>4.9 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

Emissions Unit Information Section  1  of  2

Allowable Emissions (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>Max. Total Conc. 23 mg/kg</b>		
4. Equivalent Allowable Emissions:	<b>1.61 lb/hour</b>	<b>4.9 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>Maximum TCLP from soil analysis = 0.2 mg/l with a total concentration of 23 mg/kg.</b>		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  14  of  21

1. Pollutant Emitted: <b>H115 (Methyl Alcohol)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.03 lb/hour</b>	<b>0.1 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

Emissions Unit Information Section 1 of 2

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  15  of  21

1. Pollutant Emitted: <b>H126 (Methyl t-butyl ether)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.168 lb/hour</b>	<b>5.1 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

**Emissions Unit Information Section  1  of  2**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>
2. Future Effective Date of Allowable Emissions: <b>NA</b>
3. Requested Allowable Emissions and Units: <b>NA</b>
4. Equivalent Allowable Emissions: <b>NA lb/hour &lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**B.**

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: <b>lb/hr tons/year</b>
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

1. Pollutant Emitted: <b>H32 (Naphthalene)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.07 lb/hour</b>	<b>0.2 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		



Emissions Unit Information Section 1 of 2

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section 1 of 2

Pollutant Detail Information: 17 of 21

1. Pollutant Emitted: <b>PB (Lead)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.08 lb/hour</b>	<b>0.2 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

Emissions Unit Information Section  1  of  2

Allowable Emissions (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>
2. Future Effective Date of Allowable Emissions: <b>NA</b>
3. Requested Allowable Emissions and Units: <b>NA</b>
4. Equivalent Allowable Emissions: <b>NA lb/hour &lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**B.**

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: <b>lb/hr tons/year</b>
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Pollutant Detail Information: 18 of 21

1. Pollutant Emitted: <b>H162 (Selenium)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.27 lb/hour</b>	<b>0.8 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  19  of  21

1. Pollutant Emitted: <b>H169 (Toluene)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.98 lb/hour</b>	<b>3.0 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**Pollutant Detail Information:**  20  of  21

1. Pollutant Emitted: <b>H181 (2,2,4 Trimethylpentane)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.36 lb/hour</b>	<b>1.1 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		



**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

Emissions Unit Information Section  1  of  2

Pollutant Detail Information: 21 of 21

1. Pollutant Emitted: <b>H186 (Xylene)</b>		
2. Total Percent Efficiency of Control: <b>99 %</b>		
3. Potential Emissions:	<b>0.98 lb/hour</b>	<b>3.0 tons/year</b>
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>Refer to Attachment 005</b> Reference: <b>Refer to Attachment 005</b>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Refer to Attachment 005</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>Pollutant is synthetically limited based on limiting the annual throughput rate of contaminated soil.</b>		

**Emissions Unit Information Section 1 of 2**

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: <b>ESCTV</b>		
2. Future Effective Date of Allowable Emissions: <b>NA</b>		
3. Requested Allowable Emissions and Units: <b>NA</b>		
4. Equivalent Allowable Emissions:	<b>NA lb/hour</b>	<b>&lt; 10 tons/year</b>
5. Method of Compliance (limit to 60 characters): <b>Soil analysis per Rule 62-775, F.A.C.</b>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**B.**

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	<b>lb/hr</b>	<b>tons/year</b>
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION  
(Regulated Emissions Units Only)**

**Visible Emissions Limitation:** Visible Emissions Limitation  1  of  1

1. Visible Emissions Subtype: <b>VE5</b>	
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity:	Normal Conditions: <b>5 %</b> Exceptional Conditions: <b>5 %</b> Maximum Period of Excess Opacity Allowed: <b>0 min/hour</b>
4. Method of Compliance:	<b>EPA Method 9</b>
5. Visible Emissions Comment (limit to 200 characters):  <b>Basis: 62-296.415(2)</b>  <b>This opacity limitation applies to the final exhaust stack</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_\_ of \_\_\_\_\_

1. Visible Emissions Subtype:	
2. Basis for Allowable Opacity:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity:	Normal Conditions:      %      Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

**Continuous Monitoring System:** Continuous Monitor  1  of  1

1. Parameter Code: <b>EM</b>	2. Pollutant(s): <b>CO</b>
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: <b>Thermal Environmental Instruments</b> Model Number: <b>48 (Thermo Electron)</b> Serial Number:	
5. Installation Date: <b>January 1996</b>	
6. Performance Specification Test Date: <b>NA</b>	
7. Continuous Monitor Comment (limit to 200 characters):	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Emissions Unit Information Section  1  of  2

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
SO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
NO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
4. Baseline Emissions:			
PM	0 lb/hour	0 tons/year	
SO2	0 lb/hour	0 tons/year	
NO2		0 tons/year	
5. PSD Comment (limit to 200 characters):			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements for All Applications**

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>003</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>004</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Compliance Test Report <input checked="" type="checkbox"/> Not Attached, Document ID: <b><u>Will submit at a later date.</u></b>  <input type="checkbox"/> Previously submitted, Date: _____  <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable



**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <b>005-HAP Emissions Determination</b> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required)  <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____  <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____  <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____  <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____  <input checked="" type="checkbox"/> Not Applicable

### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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 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.



**B.**

1. Description (limit to 200 characters):
2. Control Device or Method Code:

**C.**

1. Description (limit to 200 characters):
2. Control Device or Method Code:

**C. EMISSIONS UNIT DETAIL INFORMATION  
(Regulated Emissions Units Only)**

**Emissions Unit Details**

1. Initial Startup Date: NA
2. Long-term Reserve Shutdown Date: NA
3. Package Unit: <b>Diesel Generator</b> Manufacturer: <b>Cummins</b> Model Number: <b>NT 855-65</b>
4. Generator Nameplate Rating: <b>0.3 MW</b>
5. Incinerator Information: NA Dwell Temperature: °F Dwell Time: seconds Incinerator Afterburner Temperature: °F

**Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: <b>1.86 mmBtu/hr</b>
2. Maximum Incineration Rate: NA              lb/hr                                      tons/day
3. Maximum Process or Throughput Rate: NA
4. Maximum Production Rate: NA
5. Operating Capacity Comment (limit to 200 characters):

**Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

**D. EMISSIONS UNIT REGULATIONS  
(Regulated Emissions Units Only)**

**Rule Applicability Analysis** (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.)

**RULE APPLICABILITY:**

- Rule 62-4 , F.A.C.
- Rule 62-204, F.A.C.
- Rule 62-210, F.A.C.
- Rule 62-212, F.A.C.
- Rule 62-296, F.A.C.
- Rule 62-297, F.A.C.



**E. EMISSION POINT (STACK/VENT) INFORMATION**  
**(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>Attachment 001-Generator Stack</b>
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <b>NA</b>
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>NA</b>
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input type="checkbox"/> V <input checked="" type="checkbox"/> W
6. Stack Height: <b>NA</b> feet
7. Exit Diameter: <b>NA</b> feet
8. Exit Temperature: <b>Approximately 300 °F</b>



**Emissions Unit Information Section 2 of 2**

9. Actual Volumetric Flow Rate: NA acfm
10. Percent Water Vapor : NA %
11. Maximum Dry Standard Flow Rate: NA dscfm
12. Nonstack Emission Point Height: <b>Approximately 15</b> feet
13. Emission Point UTM Coordinates: Zone:                      East (km):                      North (km):
14. Emission Point Comment (limit to 200 characters):  <b>Emission point is exhaust from diesel generator, vertical pipe with a weather cap.</b>

**F. SEGMENT (PROCESS/FUEL) INFORMATION  
(Regulated and Unregulated Emissions Units)**

**Segment Description and Rate:** Segment (  1  of  1  )

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): <b>Internal Combustion Engines/Industrial/Distillate Oil (Diesel)/Reciprocating</b>	
2. Source Classification Code (SCC): <b>2-02-001-02</b>	
3. SCC Units: <b>1000 Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.013 Thousand Gallons Burned</b>	5. Maximum Annual Rate: <b>116.4 Thousand Gallons Burned</b>
6. Estimated Annual Activity Factor: <b>NA</b>	
7. Maximum Percent Sulfur: <b>***See Attachment 003***</b>	8. Maximum Percent Ash: <b>NA</b>
9. Million Btu per SCC Unit: <b>140.0</b>	
10. Segment Comment:	



**H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units Only - Emissions Limited Pollutants Only)**

**Pollutant Detail Information:**  1  of  6

1. Pollutant Emitted: <b>PM</b>		
2. Total Percent Efficiency of Control:	<b>NA</b>	%
3. Potential Emissions:	<b>0.58 lb/hour</b>	<b>2.5 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.31 lb PM/mmBtu</b> Reference: <b>AP-42, Fifth Edition, Table 3.3-2, Uncontrolled Diesel Industrial Engines</b>		
7. Emissions Method Code: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly: 1.86 mmBtu/hr from diesel fuel x 0.31 lb-PM/mmBtu = 0.58 lbs/hr</b> <b>Annual: 0.58 lbs PM/hr x 8760 hrs/2000 lbs = 2.53 tons/year</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>PM is assumed to be all PM10.</b>  <b>The purpose of providing information on this page is to supply DEP with requested information. This pollutant is not emissions limited for this emissions unit.</b>		

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: NA
2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: NA
4. Equivalent Allowable Emissions: NA                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters): NA
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>There are no applicable emission standards for the generator.</b>

B. (NA)

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hr                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**Pollutant Detail Information:**  2  of  6

1. Pollutant Emitted: <b>PM10</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		%
3. Potential Emissions:	<b>0.58 lb/hour</b>	<b>2.5 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.31 lb PM/mmBtu</b> Reference: <b>AP-42, Fifth Edition, Table 3.3-2, Uncontrolled Diesel Industrial Engines</b>		
7. Emissions Method Code: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 1.86 mmBtu/hr from diesel fuel x 0.31 lb-PM/mmBtu = <b>0.58 lbs/hr</b> <b>Annual:</b> 0.58 lbs PM/hr x 8760 hrs/2000 lbs = <b>2.53 tons/year</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>PM is assumed to be all PM10.</b>  <b>The purpose of providing information on this page is to supply DEP with requested information. This pollutant is not emissions limited for this emissions unit.</b>		

**Allowable Emissions** (Pollutant identified on front of page)

**A.**

1. Basis for Allowable Emissions Code: NA
2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: NA
4. Equivalent Allowable Emissions: NA                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters): NA
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>There are no applicable emission standards for the generator.</b>

**B. (NA)**

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hr                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Pollutant Detail Information: 3 of 6

1. Pollutant Emitted: <b>CO</b>		
2. Total Percent Efficiency of Control: <b>NA</b>		%
3. Potential Emissions:	<b>1.77 lb/hour</b>	<b>7.7 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.95 lb CO/mmBtu</b> Reference: <b>AP-42, Fifth Edition, Table 3.3-2, Uncontrolled Diesel Industrial Engines</b>		
7. Emissions Method Code: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 1.86 mmBtu/hr from diesel fuel x 0.95 lb CO/mmBtu = <b>1.77 lbs/hr</b> <b>Annual:</b> 1.77 lbs CO/hr x 8760 hrs/2000 lbs = <b>7.7 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>The purpose of providing information on this page is to supply DEP with requested information. This pollutant is not emissions limited for this emissions unit.</b>		



Emissions Unit Information Section  2  of  2

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: NA
2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: NA
4. Equivalent Allowable Emissions: NA                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters): NA
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>There are no applicable emission standards for the generator.</b>

B. (NA)

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hr                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**Pollutant Detail Information:**  4  of  6

1. Pollutant Emitted: <b>NOX</b>	
2. Total Percent Efficiency of Control: <b>NA</b>	%
3. Potential Emissions:	<b>8.21 lb/hour</b> <b>35.9 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3                      _____ to _____ tons/year	
6. Emission Factor: <b>4.41 lb NOX/mmBtu</b> Reference: <b>AP-42, Fifth Edition, Table 3.3-2, Uncontrolled Diesel Industrial Engines</b>	
7. Emissions Method Code: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 1.86 mmBtu/hr from diesel fuel x 4.41 lb NOX/mmBtu = <b>8.21 lbs/hr</b> <b>Annual:</b> 4.41 lbs NOX/hr x 8760 hrs/2000 lbs = <b>35.9 tons/yr</b>	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>The purpose of providing information on this page is to supply DEP with requested information. This pollutant is not emissions limited for this emissions unit.</b>	

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: NA
2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: NA
4. Equivalent Allowable Emissions: NA                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters): NA
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>There are no applicable emission standards for the generator.</b>

B. (NA)

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hr                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**Pollutant Detail Information:**  5  of  6

1. Pollutant Emitted: <b>VOC</b>		
2. Total Percent Efficiency of Control: <b>NA</b> %		
3. Potential Emissions:	<b>0.65 lb/hour</b>	<b>2.9 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.35 lb VOC/mmBtu</b> Reference: <b>AP-42, Fifth Edition, Table 3.3-2, Uncontrolled Diesel Industrial Engines</b>		
7. Emissions Method Code: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 1.86 mmBtu/hr from diesel fuel x 0.35 lb VOC/mmBtu = <b>0.65 lbs/hr</b> <b>Annual:</b> 0.65 lbs VOC/hr x 8760 hrs/2000 lbs = <b>2.85 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>The purpose of providing information on this page is to supply DEP with requested information. This pollutant is not emissions limited for this emissions unit.</b>		

Emissions Unit Information Section  2  of  2

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: NA
2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: NA
4. Equivalent Allowable Emissions: NA                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters): NA
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>There are no applicable emission standards for the generator.</b>

B. (NA)

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hr                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**Pollutant Detail Information:**  6  of  6

1. Pollutant Emitted: <b>SO2</b>		
2. Total Percent Efficiency of Control:	<b>NA</b>	%
3. Potential Emissions:	<b>0.54 lb/hour</b>	<b>2.4 tons/year</b>
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <b>NA</b> <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3      _____ to _____ tons/year		
6. Emission Factor: <b>0.29 lb SO2/mmBtu</b> Reference: <b>AP-42, Fifth Edition, Table 3.3-2, Uncontrolled Diesel Industrial Engines</b>		
7. Emissions Method Code: <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):  <b>Hourly:</b> 1.86 mmBtu/hr from diesel fuel x 0.29 lb SO2/mmBtu = <b>0.54 lbs/hr</b> <b>Annual:</b> 0.54 lbs SO2/hr x 8760 hrs/2000 lbs = <b>2.36 tons/yr</b>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  <b>The purpose of providing information on this page is to supply DEP with requested information. This pollutant is not emissions limited for this emissions unit.</b>		

Emissions Unit Information Section  2  of  2

Allowable Emissions (Pollutant identified on front of page)

A.

1. Basis for Allowable Emissions Code: NA
2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: NA
4. Equivalent Allowable Emissions: NA                      lb/hour                      tons/year
5. Method of Compliance (limit to 60 characters): NA
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  <b>There are no applicable emission standards for the generator.</b>

B. (NA)

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions:                      lb/hr                      tons/year
5. Method of Compliance (limit to 60 characters):
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

**I. VISIBLE EMISSIONS INFORMATION**  
**(Regulated Emissions Units Only)**

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1. Visible Emissions Subtype: NA
2. Basis for Allowable Opacity: NA <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: NA Normal Conditions:    %      Exceptional Conditions:    % Maximum Period of Excess Opacity Allowed:      min/hour
4. Method of Compliance: NA
5. Visible Emissions Comment (limit to 200 characters): NA

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_\_ of \_\_\_\_

1. Visible Emissions Subtype:
2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions:                    %      Exceptional Conditions:                    % Maximum Period of Excess Opacity Allowed:                    min/hour
4. Method of Compliance:
5. Visible Emissions Comment (limit to 200 characters):



**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

1. Parameter Code: NA	2. Pollutant(s): NA
3. CMS Requirement: NA	[ ] Rule [ ] Other
4. Monitor Information: NA Manufacturer: Model Number: Serial Number:	
5. Installation Date: NA	
6. Performance Specification Test Date: NA	
7. Continuous Monitor Comment (limit to 200 characters):	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_\_ of \_\_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters):	

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT  
TRACKING INFORMATION  
(Regulated and Unregulated Emissions Units)**

**PSD Increment Consumption Determination**

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:			
PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
SO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
NO2	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown
4. Baseline Emissions:			
PM		0 lb/hour	0 tons/year
SO2		0 lb/hour	0 tons/year
NO2			0 tons/year
5. PSD Comment (limit to 200 characters):			

**L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements for All Applications**

<p>1. Process Flow Diagram  <input checked="" type="checkbox"/> Attached, Document ID: <u>001</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</p>
<p>2. Fuel Analysis or Specification  <input checked="" type="checkbox"/> Attached, Document ID: <u>003</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</p>
<p>3. Detailed Description of Control Equipment  <input checked="" type="checkbox"/> Attached, Document ID: <u>004</u>    <input type="checkbox"/> Not Applicable    <input type="checkbox"/> Waiver Requested</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</p>
<p>5. Compliance Test Report  <input type="checkbox"/> Attached, Document ID: _____   <input type="checkbox"/> Previously submitted, Date: _____   <input checked="" 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. Supplemental Information for Construction Permit Application  <input type="checkbox"/> Attached, Document ID: _____    <input checked="" type="checkbox"/> Not Applicable</p>
<p>9. Other Information Required by Rule or Statute  <input type="checkbox"/> Attached, Document ID: _____    <input checked="" type="checkbox"/> Not Applicable</p>

**Additional Supplemental Requirements for Category I Applications Only**

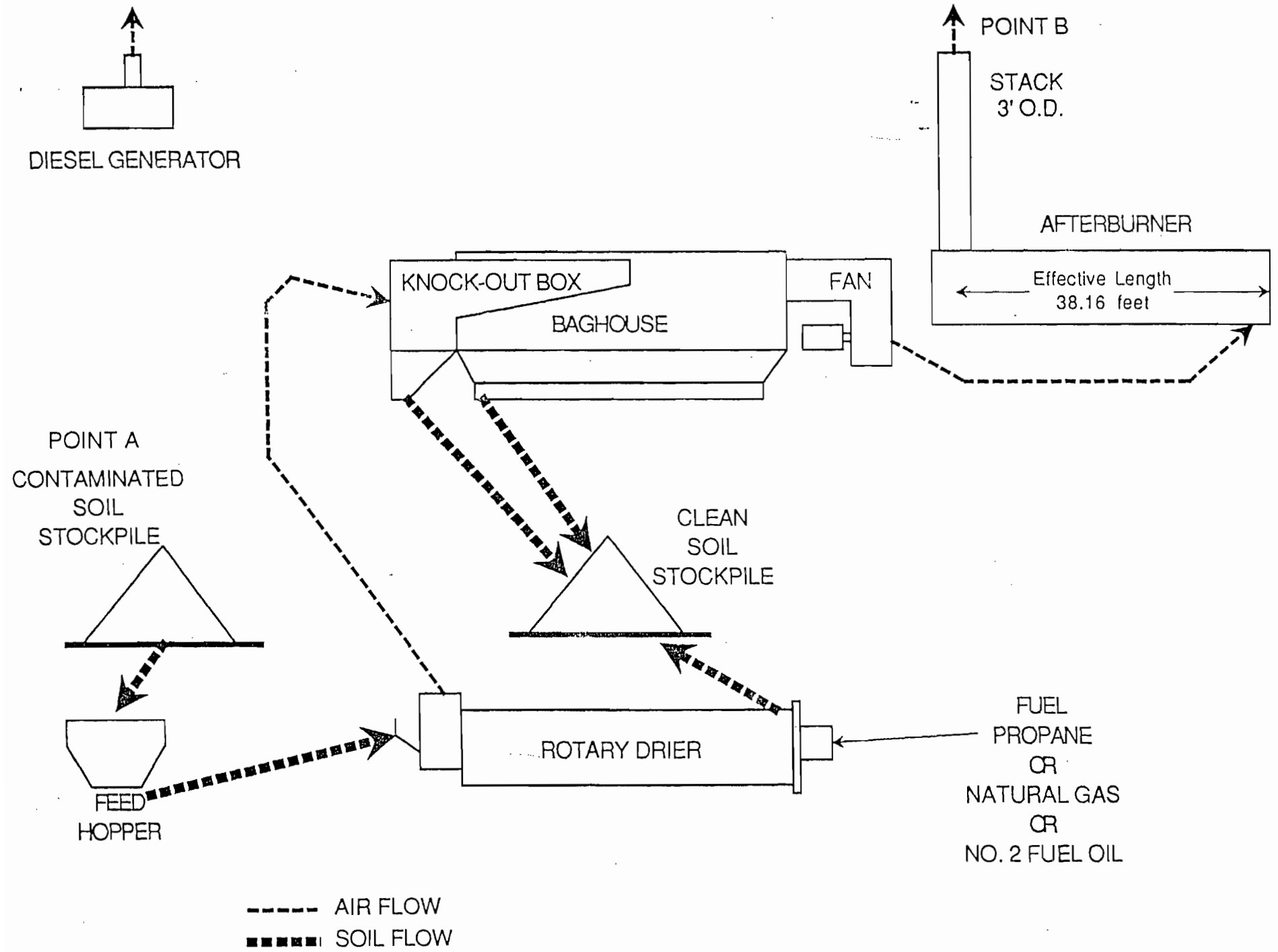
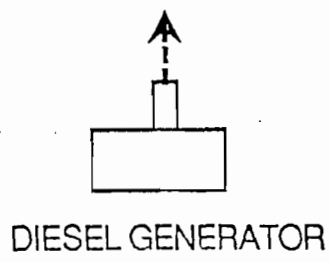
10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required)  <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____  <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____  <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____  <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____  <input checked="" type="checkbox"/> Not Applicable

## ATTACHMENT LIST

- Attachment 001: Process Flow Diagram**
- Attachment 002: Facility Supplemental Information**
- Attachment 003: Fuel Specifications**
- Attachment 004: Detailed Description of Control Equipment**
- Attachment 005: HAP Emissions Determination**
- Attachment 006: Estimated Pollutant Emissions and Referenced Emission Factors**
- Attachment 007: Soil Decontamination Procedure**
- Attachment 008: Particulate Matter Emissions Measurements dated August 15, 1991**

**Attachment 001**

**Process Flow Diagram**





**Attachment 002**

**Facility Supplemental Information**

**Attachment 002**  
**SECTION II: FACILITY INFORMATION**  
**PART D: FACILITY SUPPLEMENTAL INFORMATION**

**QUESTION 4: Precautions to Prevent Emissions of Unconfined Particulate Matter**

The handling of the processed soil and vehicle traffic will likely be the most significant sources of unconfined particulate matter emissions.

- The control of unconfined particulate matter emissions from processed soil will be controlled by water spray as necessary.
- The control of emissions resulting from vehicle movement will be controlled, as necessary, by the application of a chemical dust suppressant or water.

**QUESTION 5: FUGITIVE EMISSIONS IDENTIFICATION**

The generation of fugitive particulate matter emissions during the handling of contaminated soil is expected to be minimal; primarily because of the inherent moisture content of this material. If fugitive emissions do become a problem during the handling of contaminated soil (during the receiving, storage, or transfer to the processing plant), these emissions will be controlled by water sprays.

**Attachment 003**

**Fuel Specifications**

Attachment 003

Fuel Specifications

KleenSoil International, Incorporated requests permission to use virgin No. 2 fuel oil, natural gas or propane for the kiln and afterburner and No. 2 fuel oil for the generator.

The fuels will be fired singularly to the kiln and afterburner. It is possible that one fuel might be fired to the kiln while a different type of fuel is fired to the afterburner. It is not proposed, however, that a mixture of two or more fuels will be fired co-currently to either the kiln or the afterburner. If the blending and co-firing of fuels does appear feasible in the future, an amendment to the permit will be requested.

During a 30-day rolling average the sulfur content will not exceed 0.3 percent. The maximum sulfur content requested is 0.75 percent.

To provide the Department with assurance that the sulfur content of the virgin No. 2 fuel oil will neither exceed 0.75% maximum nor 0.3% on a 30-day average, KleenSoil International, Incorporated will require oil suppliers to provide certification of the sulfur content of each shipment of fuel and the quantity of fuel contained in each shipment, KleenSoil International, Incorporated can maintain a running average of the sulfur content of the fuels used during each month, KleenSoil International, Incorporated can assure itself and the Department that the 30-day average sulfur content of the fuel will not exceed 0.3%. The records of fuel deliveries and the running 30-day average fuel sulfur levels will be maintained and available for the Department's review, as required by applicable state regulations.

The record keeping will include records of individual shipments of fuel and cumulative quantities of fuel received during each calendar year and records of the monthly average sulfur contents of the virgin No. 2 diesel fuel. Additionally, KleenSoil International, Incorporated will maintain records of fuel use during each day of plant operation and of the number of hours that the plant operates each day. These records will include the amount and type of fuel consumed.

FUEL SPECIFICATIONS

	Natural Gas	No. 2 Fuel Oil	Propane
Percent Sulfur	Nil	0.30	Nil
Percent Ash	Nil	Nil	Nil
Percent Nitrogen	Nil	Nil	Nil
Density (lb/gal)	1 lb/23.8 ft <sup>3</sup>	7.21	4.24 @ 60 F
Heat Capacity (BTU/gal)	1,000 SCF	140,000	90,500
Other Contaminants	None	None	None

TYPICAL PARAMETERS OF VARIOUS FUELS<sup>a</sup>

Type Of Fuel	Heating Value		Sulfur % (by weight)	Ash % (by weight)
	kcal	Btu		
<b>Solid Fuels</b>				
Bituminous Coal	7,200/kg	13,000/lb	0.6-5.4	4-20
Anthracite Coal	6,810/kg	12,300/lb	0.5-1.0	7.0-16.0
Lignite (@ 35% moisture)	3,990/kg	7,200/lb	0.7	6.2
Wood (@ 40% moisture)	2,880/kg	5,200/lb	N	1-3
Bagasse (@ 50% moisture)	2,220/kg	4,000/lb	N	1-2
Bark (@ 50% moisture)	2,492/kg	4,500/lb	N	1-3 <sup>b</sup>
Coke, Byproduct	7,380/kg	13,300/lb	0.5-1.0	0.5-5.0
<b>Liquid Fuels</b>				
Residual Oil	9.98 x 10 <sup>6</sup> /m <sup>3</sup>	150,000/gal	0.5-4.0	0.05-0.1
* Distillate Oil	9.30 x 10 <sup>6</sup> /m <sup>3</sup>	140,000/gal	0.2-1.0	N
Diesel	9.12 x 10 <sup>6</sup> /m <sup>3</sup>	137,000/gal	0.4	N
Gasoline	8.62 x 10 <sup>6</sup> /m <sup>3</sup>	130,000/gal	0.03-0.04	N
Kerosene	8.32 x 10 <sup>6</sup> /m <sup>3</sup>	135,000/gal	0.02-0.05	N
Liquid Petroleum Gas	6.25 x 10 <sup>6</sup> /m <sup>3</sup>	94,000/gal	N	N
<b>Gaseous Fuels</b>				
Natural Gas	9,341/m <sup>3</sup>	1,050/SCF	N	N
Coke Oven Gas	5,249/m <sup>3</sup>	590/SCF	0.5-2.0	N
Blast Furnace Gas	890/m <sup>3</sup>	100/SCF	N	N

<sup>a</sup> N = negligible.

<sup>b</sup> Ash content may be considerably higher when sand, dirt, etc., are present.

THERMAL EQUIVALENTS FOR VARIOUS FUELS

Type Of Fuel	kcal	Btu (gross)
<b>Solid fuels</b>		
Bituminous coal	(5.8 to 7.8) x 10 <sup>6</sup> /Mg	(21.0 to 28.0) x 10 <sup>6</sup> /ton
Anthracite coal	7.03 x 10 <sup>6</sup> /Mg	25.3 x 10 <sup>6</sup> /ton
Lignite	4.45 x 10 <sup>6</sup> /Mg	16.0 x 10 <sup>6</sup> /ton
Wood	1.47 x 10 <sup>6</sup> /m <sup>3</sup>	21.0 x 10 <sup>6</sup> /cord
<b>Liquid fuels</b>		
Residual fuel oil	10 x 10 <sup>3</sup> /liter	6.3 x 10 <sup>6</sup> /bbl
Distillate fuel oil	9.35 x 10 <sup>3</sup> /liter	5.9 x 10 <sup>6</sup> /bbl
<b>Gaseous fuels</b>		
* Natural gas	9,350/m <sup>3</sup>	1,050/ft <sup>3</sup>
Liquefied petroleum gas		
Butane	6,480/liter	97,400/gal
* Propane	6,030/liter	90,500/gal

WEIGHTS OF SELECTED SUBSTANCES

Type Of Substance	g/liter	lb/gal
Asphalt	1030	8.57
Butane, liquid at 60°F	579	4.84
Crude oil	850	7.08
Distillate oil	845	7.05
Gasoline	739	6.17
Propane, liquid at 60°F	507	4.24
Residual oil	944	7.88
Water	1000	8.4

DENSITIES OF SELECTED SUBSTANCES

Substance	Density	
<b>Fuels</b>		
Crude Oil	874 kg/m <sup>3</sup>	7.3 lb/gal
Residual Oil	944 kg/m <sup>3</sup>	7.88 lb/gal
* Distillate Oil	845 kg/m <sup>3</sup>	7.05 lb/gal
Gasoline	739 kg/m <sup>3</sup>	6.17 lb/gal
* Natural Gas	673 kg/m <sup>3</sup>	1 lb/23.8 ft <sup>3</sup>
Butane	579 kg/m <sup>3</sup>	4.84 lb/gal (liquid)
* Propane	507 kg/m <sup>3</sup>	4.24 lb/gal (liquid)
<b>Wood (Air dried)</b>		
Elm	561 kg/m <sup>3</sup>	35 lb/ft <sup>3</sup>
Fir, Douglas	513 kg/m <sup>3</sup>	32 lb/ft <sup>3</sup>
Fir, Balsam	400 kg/m <sup>3</sup>	25 lb/ft <sup>3</sup>
Hemlock	465 kg/m <sup>3</sup>	29 lb/ft <sup>3</sup>
Hickory	769 kg/m <sup>3</sup>	48 lb/ft <sup>3</sup>
Maple, Sugar	689 kg/m <sup>3</sup>	43 lb/ft <sup>3</sup>
Maple, White	529 kg/m <sup>3</sup>	33 lb/ft <sup>3</sup>
Oak, Red	673 kg/m <sup>3</sup>	42 lb/ft <sup>3</sup>
Oak, White	769 kg/m <sup>3</sup>	48 lb/ft <sup>3</sup>
Pine, Southern	641 kg/m <sup>3</sup>	40 lb/ft <sup>3</sup>
<b>Agricultural Products</b>		
Corn	25.4 kg/bu	56 lb/bu
Milo	25.4 kg/bu	56 lb/bu
Oats	14.5 kg/bu	32 lb/bu
Barley	21.8 kg/bu	48 lb/bu
Wheat	27.2 kg/bu	60 lb/bu
Cotton	226 kg/bale	500 lb/bale
<b>Mineral Products</b>		
Brick	2.95 kg/brick	6.5 lb/brick
Cement	170 kg/bbl	375 lb/bbl
Cement	1483 kg/m <sup>3</sup>	2500 lb/yd <sup>3</sup>

**BEST AVAILABLE COPY**

TYPICAL FUEL SPECIFICATIONS

\*

Grade	No. 1 Fuel Oil	No. 2 Fuel Oil	No. 4 Fuel Oil	No. 5 Fuel Oil	No. 6 Fuel Oil
Type	Distillate (Kerosene)	Distillate	Very Light Residual	Light Residual	Residual
Color	Light	Amber	Black	Black	Black
API gravity, 60 F	40	32	21	17	13
Specific gravity, 60/60 F	0.8251	0.8654	0.9279	0.9529	0.9861
Weight per U.S. gallon, 60 F	6.870	7.206	7.727	7.935	8.212
Viscos., Centistokes, 100 F	1.6	2.68	15.0	50.0	360.0
Viscos., Saybolt Univ., 100 F	31	35	77	232	—
Viscos., Saybolt Furol, 122 F	—	—	—	—	170
Pour point, F	Below zero	Below zero	10	30	65
Temp. for pumping, F	Atmospheric	Atmospheric	15 min.	35 min.	100
Temp. for atomizing, F	Atmospheric	Atmospheric	25 min.	130	200
Carbon residue, per cent	Trace	Trace	2.5	5.0	12.0
Sulfur, per cent	0.1	0.4-0.7	0.4-1.5	2.0 max.	2.8 max.
Oxygen and nitrogen, per cent	0.2	0.2	0.48	0.70	0.92
Hydrogen, per cent	13.2	12.7	11.9	11.7	10.5
Carbon, per cent	86.5	86.4	86.10	85.55	85.70
Sediment and water, per cent	Trace	Trace	0.5 max.	1.0 max.	2.0 max.
Ash, per cent	Trace	Trace	0.02	0.05	0.08
Btu per gallon	137,000	141,000	146,000	148,000	150,000

\* Technical information from Humble Oil & Refining Company.



**Attachment 004**

**Detailed Description of Control Equipment**

**Attachment 004**

**Detailed Description of Control Equipment**

**Baghouse:**

Max No. Bags: 420 Nomex Bags; 8" diameter and 10' long  
Media Area: 8939 sq. ft.  
Total Filter CFM: 59,820 acfm  
Air to Cloth Ratio: 6.7 to 1  
Control Efficiency: 98.4%

**Afterburner:**

Control Efficiency: 99%  
Dwell Temperature: 1600 °F  
Dwell Time: 0.5 seconds  
Incinerator Afterburner Temperature : 1600 °F  
Stack Ht: 30.0 ft  
Stack Diameter: 3.0 ft<sup>2</sup>

**Attachment 005**

**HAP Emissions Determination**

**Attachment 005**  
**HAP Emissions Determination**

**Emissions of HAPs associated with treating soil contaminated with gasoline & diesel fuel:**

HAPs	VHAP Wt %	Reference	(lb/hr)	(tpy)
Benzene (H017)	5.0	GMP	0.70	2.1
Ethylbenzene (H085)	5.0	GMP	0.70	2.1
Hexane (H104)	4.4	DEP-MEMO	0.62	1.9
Methyl alcohol (H115)	0.2	GMP	0.03	0.1
Methyl t-butyl ether (H126)	12.0	GMP	1.68	5.1
Napthalene (H132)	0.5	GMP	0.07	0.2
Toluene (H169)	7.0	GMP	0.98	3.0
2,2,4 Trimethylpentane (H181)	2.6	DEP-MEMO	0.36	1.1
Xylene (H186)	7.0	GMP	0.98	3.0

Note 1: The VHAP weight % is the greatest amount expected from unleaded gasoline, premium gasoline, & diesel.

Note 2: GMP: Groundwater Monitoring Parameters & Pollution Sources-Third Edition

Note 3: DEP-MEM (FDEP MEMO-Methods of Determining/Quantifying HAPs)

Note 4: The hourly emission rate is based on processing 1400 lbs/hr of VOC from the Soil with an afterburner efficiency of 99%.

Note 5: The annual emission rate is based on 8,760 hrs of operation and an annual throughput of 214,000 tpy.

**Emissions of RCRA HAP Metals Associated with Processing Soil:**

Metals	Conc. (ppm)	Reference	(lb/hr)	(tpy)
<b>(Volatile)</b>				
Mercury (H114)	23	Rule 62-775.400	1.610	4.92
<b>(Semi-Volatile)</b>				
Cadmium (H027)	37	Rule 62-775.400	0.026	0.08
Lead (PB)	108	Rule 62-775.400	0.076	0.23
Selenium (H162)	389	Rule 62-775.400	0.272	0.83
<b>(Refractory)</b>				
Arsenic (H015)	10	Rule 62-775.400	0.007	0.02
Chromium (H046)	50	Rule 62-775.400	0.035	0.11

Note 1: Barium & silver are RCRA metals, but are not included in the list of 189 HAPs.

Note 2: The metal concentration is based on the maximum allowable concentration from Rule 62-775.400, F.A.C. (Table 1).

Note 3: The hourly emission rate is based on processing 35 tons of soil per hour.

Note 4: As a conservative approach, metals that are volatile are not expected to be collected in the baghouse.

Note 5: Metals that are semi-volatile and refractory are expected to be collected in the baghouse with an efficiency of 99%.

Note 6: The annual emission rate is based on 8,760 hrs of operation and an annual throughput of 214,000 tpy.

GROUNDWATER MONITORING PARAMETERS

AND

POLLUTION SOURCES

THIRD EDITION, MAY 1989

GEOFFREY B. WATTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

BUREAU OF WASTE CLEANUP

Table 7.3.1

## Unleaded Gasoline Composition (Volume%)

<u>Regular Unleaded</u>		<u>Premium Unleaded</u>	
<u>normal/iso hydrocarbons (58%)</u>		<u>normal/iso hydrocarbons (54%)</u>	
78-78-4 isopentane	(9-11%)	isopentane	(9-11%)
106-97-8 n-butane	(4-5%)	n-butane	(4-5%)
109-66-0 n-pentane	(2.6-2.7%)	n-pentane	(2.6-2.7%)
75-28-5 isobutane	(0.7-1%)	isobutane	(0.7-1%)
74-98-6 propane	(0.07-0.08%)	propane	(0.07-0.08%)
107-83-5 2-methylpentane	—	2-methylpentane	—
100-54-3 hexane (H104)	—	hexane	—
methylhexanes	—	methylhexanes	—
heptane	—	heptane	—
methylheptanes	—	methylheptanes	—
methyloctanes	—	methyloctanes	—
decane	—	decane	—
undecane	—	undecane	—
<u>Aromatic Hydrocarbons (32%)</u>		<u>Aromatic Hydrocarbons (36%)</u>	
1330-20-7 xylenes (H186)	(6-7%)	xylenes	(6-7%)
168-88-3 toluene (H169)	(6-7%)	toluene	(6-7%)
100-41-4 ethylbenzene (H085)	(5%)	ethylbenzene	(5%)
71-43-2 benzene (H017)	(2-5%)	benzene	(2-5%)
408-67-8 1,3,5-trimethylbenzene	(1.3%)	1,3,5-trimethylbenzene	(1.3%)
108-67-8 1,2,3-trimethylbenzene	(0.73%)	1,2,3-trimethylbenzene	(0.73%)
103-65-1 n-propylbenzene	(0.6%)	n-propylbenzene	(0.6%)
91-20-3 naphthalene (H132)	(0.2-0.5%)	naphthalene	(0.2-0.5%)
104-51-8 n-butylbenzene	(0.08%)	n-butylbenzene	(0.08%)
40-12-0 OR 91-57-6 methyl naphthalenes	—	methyl naphthalenes	—
benzo(b)fluoranthene	(3.9 mg/l)	benzo(b)fluoranthene	(3.9 mg/l)
206-44-0 fluoranthene	(1.84 mg/l)	fluoranthene	(1.84 mg/l)
120-12-7 anthracene	(1.84 mg/l)	anthracene	(1.84 mg/l)
120-12-7 anthracene	(1.55 mg/l)	anthracene	(1.55 mg/l)
50-32-8 benzo(e)pyrene	(0.3 mg)	benzo(e)pyrene	(0.3 mg)
<u>Olefins (5%)</u>		<u>Olefins (5%)</u>	
563-45-1 3-methyl 1-butene	(0.06-0.08%)	3-methyl 1-butene	(0.06-0.08%)
2-butene	(0.16-0.17%)	2-butene	(0.16-0.17%)
<u>Cyclic Hydrocarbons (5%)</u>		<u>Cyclic Hydrocarbons (5%)</u>	
cyclopentane	—	cyclopentane	—
cyclohexane	—	cyclohexane	—
46-37-7 methylcyclopentane	—	methylcyclopentane	—
methylcyclohexane	—	methylcyclohexane	—
<u>Additives</u>		<u>Additives</u>	
64-17-5 ethyl alcohol	(up to 5%)	ethyl alcohol	(up to 5%)
(octane booster)		(octane booster)	
1634-04-4 methyl t-butyl ether (H126)	(up to 12%)	methyl t-butyl ether	(up to 12%)
(octane booster)		(octane booster)	
67-56-1 methyl alcohol (H115)	(0.2%)	methyl alcohol	(0.2%)
(fuel line anti-icer)		(fuel line anti-icer)	
78-30-8 tricresyl phosphate	(up to 0.2 mg/l)	tricresyl phosphate	(up to 0.2 mg/l)
(combustion chamber deposit modifier)		(combustion chamber deposit modifier)	
128-37-0 2,6 di-t-butyl-4-methylphenol	—	2,6 di-t-butyl-4-methylphenol	—
(anti-oxidant)		(anti-oxidant)	

Table 7.3.2

Leaded Gasoline and Aviation Full Composition (Volume%)

<u>Leaded Gasoline</u>		<u>Aviation (Jet A) Fuel</u>	
<u>normal/iso hydrocarbons (59%)</u>		<u>normal/iso hydrocarbons (59%)</u>	
isopentane	(9-11%)	undecane	(36%)
n-butane	(4-5%)	decane	(16.5%)
n-pentane	(2.6-2.7%)	3-methyloctane	(2.5%)
isobutane	(0.1%)	dodecane	(0.7%)
propane	(0.07-0.08%)	tridecane	(0.5%)
2-methylpentane	---	2,6,10-trimethyldodecane	(0.45%)
hexane	---	2-methylbutane	(0.2%)
methylhexanes	---	2-methylnonane	(0.2%)
heptane	---	2-methylbutane	(0.26%)
methylheptanes	---	3-methyldecane	(0.14%)
decane	---	4-methylnonane	(0.22%)
undecane	---		
<u>Aromatic Hydrocarbons (26%)</u>		<u>Aromatic Hydrocarbons (35%)</u>	
-xylenes	(6-7%)	1,2,4,5-tetramethylbenzene	(9%)
-toluene	(6-7%)	1,2,3-trimethylbenzene	(6.6%)
-ethylbenzene	(5%)	1,2-dimethyl-3-propylbenzene	(5.4%)
-benzene	(2-5%)	propylbenzene	(3-5%)
1,3,5-trimethylbenzene	(1.3%)	1-methyl-4-propylbenzene	(3.3%)
1,2,3-trimethylbenzene	(0.73%)	butylbenzene	(2%)
naphthalene	(0.08%)	2-methylnaphthalene	---
n-butyl benzene	(0.2-0.5%)	methylindane	(0.3%)
methylnaphthalenes	---	naphthalene	(0.14%)
benzo(b)fluoranthene	(3.9 mg/l)	2-methylnaphthalene	(0.34%)
fluoranthene	(1.84 mg/l)	1,2-diethylbenzene	(0.24%)
anthracene	(1.55 mg/l)	1,4-dimethyl-2-ethylbenzene	(0.2%)
benzo(e)pyrene	(0.3 mg/l)	1,3-dimethylnaphthalene	(0.15%)
		xylenes	(.07%)
		ethylbenzene	(0.02%)
		benzene	(0.02%)
		toluene	trace
<u>Olefins (10%)</u>		<u>Olefins (0%)</u>	
2-butene	(0.16-0.17%)		
3-methyl 1-butene	(0.06-0.08%)		
<u>Cyclic Hydrocarbons (5%)</u>		<u>Cyclic Hydrocarbons (0.93%)</u>	
cyclopentane	---	cyclopentane	(0.59%)
cyclohexane	---	tetramethylcyclopentane	(0.01%)
methylcyclopentane	---	propylcyclohexane	(0.07%)
methylcyclohexane	---	ethylcyclohexane	(0.04%)
		1,1,3-trimethylcyclohexane	(0.03%)
<u>Additives</u>		<u>Additives</u>	
tetraethyl lead	(600 mg/l)	dibromoethane (EDB)	(0.05%)
tetramethyl lead	(5 mg/l)	tetraethyl lead	(600 mg/l)
dichloroethane	(210 mg/l)		
dibromoethane (EDB)	(190 mg/l)		
2,6-di-t-butyl-4-methylphenol	---		
(anti-oxidant)			

Table 7.3.3

Diesel Fuel Composition (Volume %)Diesel Fuel #2normal/iso hydrocarbons (75%)

predominantly  
C<sub>10</sub> to C<sub>16</sub>

Aromatic Hydrocarbons (15%)

85-61-8 phenanthrene	(0.26-0.3%)
naphthalene	(0.14-0.11%)
fluorene	(0.07-0.1%)
anthracene	(0.013-0.02%)
1,2,3,4-tetrahydroquinoline	—
2,6-dimethylquinoline	—
1-methylnaphthalene	—
2,3,6-trimethylnaphthalene	—
2,3,5-trimethylnaphthalene	--
1,3,5-trimethylbenzene	trace
n-propylbenzene	trace
ethylbenzene	trace
xylene	trace
toluene	trace
benzene	trace

Additives

N,N-disalicylidene diamine (metal deactivator)	—
alkyl nitrate (cetane improver)	(0.2%)
2,6-di-t-butyl-4-methylphenol (anti-oxidant)	--



the specific conditions in Rule 62-775.700 and 62-775.710, F.A.C., shall apply.

(7) All soil thermal treatment facilities operating under a general permit shall maintain accurate records of operations. Operating report logs shall be maintained on a normal work day basis on Forms 62-775.900(2) and (3), F.A.C., and shall be maintained for a period of three years at the facility for a stationary facility, or, at an approved location for mobile facility. The Department shall have complete access to all records, field and laboratory chain-of-custody records, quality control records, raw data records, calibration records, and laboratory analyses.

(8) When treating petroleum contaminated soil, soil thermal treatment facilities shall have a minimum soil retention time and a minimum operating soil temperature which provides treatment to comply with the criteria in Rule 62-775.400, F.A.C.

(9) Soil must be screened, or otherwise processed in order to prevent particles greater than two inch mesh (diameter) from entering the thermal treatment unit. Soil thermal treatment facilities are allowed to treat debris, other than soil, such as concrete, rocks, and wood.

(10) All sampling and analysis shall be conducted pursuant to Rule 62-160.300(7), F.A.C. Soil sampling procedures shall be in accordance with the Quality Assurance Standard Operating Procedures Manual for Soil Thermal Treatment Facilities. Analysis of soil samples shall be conducted by a laboratory with an approved Quality Assurance plan under Chapter 62-160, F.A.C.

#### **62-775.400 Criteria for Clean Soil.**

Treated soil must comply with the following cleanup levels to be classified as clean soil. Mixing of treated soils to achieve these standards is prohibited.

(1) Total Volatile Organic Aromatics shall not exceed 100 ug/kg (100 ppb) using the analysis identified in Rule 62-775.410(1)(a), F.A.C.,

(2) Total Recoverable Petroleum Hydrocarbons (TRPH) shall:

(a) not exceed 10 mg/kg (10 ppm) using the analysis identified in Rule 62-775.401(1)(b), F.A.C., or

(b) not exceed 50 mg/kg (50 ppm) using the analysis identified in Rule 62-775.410(1)(b), F.A.C., provided the total of the Polynuclear Aromatic Hydrocarbons (PAH) does not exceed 1 mg/kg (1 ppm) using the analysis identified in Rule 62-775.410(1)(c), F.A.C., and the total of the Volatile Organic Halocarbons (VOH) does not exceed 50 ug/kg (50 ppb) using the analysis identified in Rule 62-775.410(1)(d), F.A.C.,

(3) Metals shall not exceed the following concentrations in Table 1 using the analyses identified in Rule 62-775.410(1)(e), F.A.C. The appropriate preparation methods identified in Rule 62-775.410(2), F.A.C., shall be used prior to metal analysis.

(a) Total Volatile Organic Aromatics (VOA)

(b) Total Recoverable Petroleum Hydrocarbons

- (c) Polynuclear Aromatic Hydrocarbons (PAH)
- (d) Volatile Organic Halocarbons (VOH)
- (e) Total Organic Halides
- (f) Metals

Arsenic  
 Barium  
 Cadmium  
 Chromium  
 Lead  
 Mercury  
 Selenium  
 Silver

TABLE I

Metals	Maximum Concentration	
	TCLP* (1) (mg/l)	Total (mg/kg)
Arsenic	5.0	10
Barium	100.0	4940
Cadmium	1.0	37
Chromium	5.0	50
Lead	5.0	108
Mercury	0.2	23
Selenium	1.0	389
Silver	5.0	353

\* TCLP = Toxicity Characteristic Leaching Procedure

(4) Under no circumstances may soils which exhibit the characteristic of toxicity for metals (EPA HW No. D004-D011) as established in 40 CFR 261.24 be blended. However, blending of soils prior to treatment to achieve the total metals criteria in Rule 62-775.400(3), F.A.C., is allowed if the pre-blended soil does not exhibit the characteristic of toxicity for those metals.

**Attachment 006**

**Estimated Pollutant Emissions and Referenced Emission Factors**

**Attachment 006**  
**Mobile Soil Thermal Treatment Unit**  
**Estimated Pollutant Emissions and Referenced Emission Factors**

Pollutant	Emission Factor (Units)	Emissions (lb/hr)	Basis	Emissions (tons/yr)			
<b>DRUM/AFTERBURNER:</b>							
<b>(No. 2 fuel oil)</b>							
<b>Pollutant</b>	<b>(lb/1000gal)</b>						
VOC	0.252	0.001	AP-42; Table 1.3-4	0.00			
NOX	20.0	6.43	AP-42; Table 1.3-2	28.15			
<b>Pollutant</b>	<b>(% Sulfur)</b>						
SO2	0.0030	13.87	Stoichiometry	60.74			
<b>(Propane)</b>							
<b>Pollutant</b>	<b>(lb/1000gal)</b>						
VOC	0.500	0.002	AP-42; Table 1.5-2 afterburner efficiency of 99%	0.01			
NOX	19.0	9.44	AP-42; Table 1.5-2	41.36			
SO2	0.0001	0.00	AP-42; Table 1.5-2	0.00			
<b>(Natural Gas)</b>							
<b>Pollutant</b>	<b>(lb/mmcf)</b>						
VOC	5.800	0.003	AP-42; Table 1.4-3	0.01			
NOX	140.0	6.30	AP-42; Table 1.4-2	27.59			
SO2	0.6000	0.03	AP-42; Table 1.4-2	0.12			
<b>(All Fuels)</b>							
<b>Pollutant</b>	<b>(grains/dscf)</b>						
PM	0.04	3.94	0.04 gr/ 11500 dscf	17.27			
PM10	0.04	3.94		17.27			
<b>Pollutant</b>	<b>(ppmvd CO/ft<sup>3</sup>)</b>						
CO	100.00	5.02	62-296.415(1)(b)	21.98			
<b>GENERATOR: (No. 2 fuel oil)</b>							
<b>Pollutant</b>	<b>(lb/mmBtu)</b>	<b>(lb/hr)</b>					
PM	0.31	0.5766	AP-42; Table 3.3-2	2.53			
PM10	0.31	0.5766	AP-42; Table 3.3-2	2.53			
NOX	4.41	8.2026	AP-42; Table 3.3-2	35.93			
CO	0.95	1.767	AP-42; Table 3.3-2	7.74			
SO2	0.29	0.5394	AP-42; Table 3.3-2	2.36			
VOC	0.35	0.651	AP-42; Table 3.3-2	2.85			
<b>SOIL:</b>							
<b>Pollutant</b>	<b>(1400 lbs/hr VOC in Soil)</b>	<b>(lb/hr)</b>					
VOC	1400.00	14.00	afterburner efficiency of 99%	42.80			
<b>DATA:</b>							
Drum/Afterburner:	45	mmBtu/hr	Generator =	1.86	mmBtu/hr	16293.60	mmBtu/yr
#2 Fuel Oil	321.00	gal/hr	gal =	13.2	gal/hr		
	2815714	gal/yr	ann_gal =	115632.0	gal/yr		
Propane	497	gal/hr					
	4355801	gal/yr					
Natural Gas	0.05	mmbtu/hr					
	394.20	mmbtu/yr					
soil =	35.00	tph					

Table 1.3-2 (English Units). CRITERIA POLLUTANT EMISSION FACTORS FOR UNCONTROLLED FUEL OIL COMBUSTION

Firing Configuration (SCC) <sup>a</sup>	SO <sub>2</sub> <sup>b</sup>		SO <sub>3</sub> <sup>c</sup>		NO <sub>x</sub> <sup>d</sup>		CO <sup>e,f</sup>		Filterable PM <sup>g</sup>	
	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING
Utility boilers										
No. 6 oil fired, normal firing (1-01-004-01)	157S	A	5.7S	C	67	A	5	A	— <sup>h</sup>	A
No. 6 oil fired, tangential firing (1-01-004-04)	157S	A	5.7S	C	42	A	5	A	— <sup>h</sup>	A
No. 5 oil fired, normal firing (1-01-004-05)	157S	A	5.7S	C	67	A	5	A	— <sup>h</sup>	B
No. 5 oil fired, tangential firing (1-01-004-06)	157S	A	5.7S	C	42	A	5	A	— <sup>h</sup>	B
No. 4 oil fired, normal firing (1-01-005-04)	150S	A	5.7S	C	67	A	5	A	— <sup>h</sup>	B
No. 4 oil fired, tangential firing (1-01-005-05)	150S	A	5.7S	C	42	A	5	A	— <sup>h</sup>	B
Industrial boilers										
No. 6 oil fired (1-02-004-01/02/03)	157S	A	2S	A	55	A	5	A	— <sup>h</sup>	A
No. 5 oil fired (1-02-004-04)	157S	A	2S	A	55	A	5	A	— <sup>h</sup>	B
Distillate oil fired (1-02-005-01/02/03)	142S	A	2S	A	20	A	5	A	— <sup>h</sup>	A
No. 4 oil fired (1-02-005-04)	150S	A	2S	A	20	A	5	A	— <sup>h</sup>	B
Commercial/institutional/residential combustors										
No. 6 oil fired (1-03-004-01/02/03)	157S	A	2S	A	55	A	5	A	— <sup>h</sup>	A
No. 5 oil fired (1-03-004-04)	157S	A	2S	A	55	A	5	A	— <sup>h</sup>	B
Distillate oil fired (1-03-005-01/02/03)	142S	A	2S	A	20	A	5	A	— <sup>h</sup>	A
No. 4 oil fired (1-03-005-04)	150S	A	2S	A	20	A	5	A	— <sup>h</sup>	B
Residential furnace (No SCC)	142S	A	2S	A	18	A	5	A	3	A

Table 1.3-4 (English Units). EMISSION FACTORS FOR TOTAL ORGANIC COMPOUNDS (TOC), METHANE, AND NONMETHANE TOC (NMTOC) FROM UNCONTROLLED FUEL OIL COMBUSTION

Firing Configuration (SCC) <sup>a</sup>	TOC <sup>b</sup>		Methane <sup>b</sup>		NMTOC <sup>b</sup>	
	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING	lb/10 <sup>3</sup> gal	EMISSION FACTOR RATING
Utility boilers						
No. 6 oil fired, normal firing (1-01-004-01)	1.04	A	0.28	A	0.76	A
No. 6 oil fired, tangential firing (1-01-004-04)	1.04	A	0.28	A	0.76	A
No. 5 oil fired, normal firing (1-01-004-05)	1.04	A	0.28	A	0.76	A
No. 5 oil fired, tangential firing (1-01-004-06)	1.04	A	0.28	A	0.76	A
No. 4 oil fired, normal firing (1-01-005-04)	1.04	A	0.28	A	0.76	A
No. 4 oil fired, tangential firing (1-01-005-05)	1.04	A	0.28	A	0.76	A
Industrial boilers						
No. 6 oil fired (1-02-004-01/02/03)	1.28	A	1	A	0.28	A
No. 5 oil fired (1-02-004-04)	1.28	A	1	A	0.28	A
Distillate oil fired (1-02-005-01/02/03)	0.252	A	0.052	A	0.2	A
No. 4 oil fired (1-02-005-04)	0.252	A	0.052	A	0.2	A
Commercial/institutional/residential combustors						
No. 6 oil fired (1-03-004-01/02/03)	1.605	A	0.475	A	1.13	A
No. 5 oil fired (1-03-004-04)	1.605	A	0.475	A	1.13	A
Distillate oil fired (1-03-005-01/02/03)	0.556	A	0.216	A	0.34	A
No. 4 oil fired (1-03-005-04)	0.556	A	0.216	A	0.34	A
Residential furnace (No SCC)	2.493	A	1.78	A	0.713	A

<sup>a</sup> SCC = Source Classification Code.

<sup>b</sup> References 16-19. Volatile organic compound emissions can increase by several orders of magnitude if the boiler is improperly operated or is not well maintained.

Table 1.5-2 (English Units). EMISSION FACTORS FOR LPG COMBUSTION<sup>a</sup>

EMISSION FACTOR RATING: E

Pollutant	Butane Emission Factor (lb/1000 gal)		Propane Emission Factor (lb/1000 gal)	
	Industrial Boilers <sup>b</sup> (1-02-010-01)	Commercial Boilers <sup>c</sup> (1-03-010-01)	Industrial Boilers <sup>b</sup> (1-02-010-02)	Commercial Boilers <sup>c</sup> (1-03-010-02)
Filterable particulate matter <sup>d</sup>	0.6	0.5	0.6	0.4
Sulfur oxides <sup>e</sup>	0.09S	0.09S	0.10S	0.10S
Nitrogen oxides <sup>f</sup>	21	15	19	14
Carbon dioxide	14,700	14,700	12,500	12,500
Carbon monoxide	3.6	2.1	3.2	1.9
Total organic compounds	0.6	0.6	0.5	0.5

<sup>a</sup> Assumes emissions (except SO<sub>x</sub> and NO<sub>x</sub>) are the same, on a heat input basis, as for natural gas combustion. The NO<sub>x</sub> emission factors have been multiplied by a correction factor of 1.5, which is the approximate ratio of propane/butane NO<sub>x</sub> emissions to natural gas NO<sub>x</sub> emissions. Source Classification Codes in parentheses.

<sup>b</sup> Heat input capacities generally between 10 and 100 million Btu/hour.

<sup>c</sup> Heat input capacities generally between 0.3 and 10 million Btu/hour.

<sup>d</sup> Filterable particulate matter (PM) is that PM collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

<sup>e</sup> Expressed as SO<sub>2</sub>. S equals the sulfur content expressed in gr/100 ft<sup>3</sup> gas vapor. For example, if the butane sulfur content is 0.18 gr/100 ft<sup>3</sup>, the emission factor would be (0.09 x 0.18) = 0.016 lb of SO<sub>2</sub>/1000 gal butane burned.

<sup>f</sup> Expressed as NO<sub>2</sub>.

#### References For Section 1.5

1. Letter dated August 19, 1992. From W. Butterbaugh of the National Propane Gas Association, Lisle, Illinois, to J. McSorley of the U. S. Environmental Protection Agency, Research Triangle Park, NC.
2. *Air Pollutant Emission Factors*, Final Report, Contract No. CPA-22-69-119, Resources Research, Inc., Reston, VA, Durham, NC, April 1970.
3. *Nitrous Oxide Reduction With The Weishaupt Flue Gas Recirculation System*, Weishaupt Research and Development Institute, January 1987.
4. Phone communication memorandum dated May 14, 1992. Conversation between B. Lusher of Acurex Environmental and D. Childress of Suburban/Petrolane, Durham, NC.

Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO<sub>2</sub>), NITROGEN OXIDES (NO<sub>x</sub>), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION<sup>a</sup>

Combustor Type (Size, 10 <sup>6</sup> Btu/hr Heat Input) (SCC) <sup>b</sup>	SO <sub>2</sub> <sup>c</sup>			NO <sub>x</sub> <sup>d</sup>			CO <sup>e</sup>		
	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING
Utility/large Industrial Boilers (>100) (1-01-006-01, 1-01-006-04)									
Uncontrolled	9.6	0.6	A	8800	550 <sup>f</sup>	A	640	40	A
Controlled - Low NO <sub>x</sub> burners	9.6	0.6	A	1300	81 <sup>f</sup>	D	ND	ND	NA
Controlled - Flue gas recirculation	9.6	0.6	A	850	53 <sup>f</sup>	D	ND	ND	NA
Small Industrial Boilers (10 - 100) (1-02-006-02)									
Uncontrolled	9.6	0.6	A	2240	140	A	560	35	A
Controlled - Low NO <sub>x</sub> burners	9.6	0.6	A	1300	81 <sup>f</sup>	D	980	61	D
Controlled - Flue gas recirculation	9.6	0.6	A	480	30	C	590	37	C
Commercial Boilers (0.3 - <10) (1-03-006-03)									
Uncontrolled	9.6	0.6	A	1600	100	B	330	21	C
Controlled - Low NO <sub>x</sub> burners	9.6	0.6	A	270	17	C	425	27	C
Controlled - Flue gas recirculation	9.6	0.6	A	580	36	D	ND	ND	NA
Residential Furnaces (<0.3) (No SCC)									
Uncontrolled	9.6	0.6	A	1500	94	B	640	40	B

<sup>a</sup> Units are kg of pollutant/10<sup>6</sup> cubic meters natural gas fired and lb of pollutant/10<sup>6</sup> cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m<sup>3</sup> (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

<sup>b</sup> SCC = Source Classification Code.

<sup>c</sup> Reference 7. Based on average sulfur content of natural gas, 4600 g/10<sup>6</sup> Nm<sup>3</sup> (2000 gr/10<sup>6</sup> scf).



Table 1.4-3 (Metric And English Units). EMISSION FACTORS FOR CARBON DIOXIDE (CO<sub>2</sub>) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMBUSTION<sup>a</sup>

Combustor Type (Size, 10 <sup>6</sup> Btu/hr Heat Input) (SCC) <sup>b</sup>	CO <sub>2</sub> <sup>c</sup>			TOC <sup>d</sup>		
	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING	kg/10 <sup>6</sup> m <sup>3</sup>	lb/10 <sup>6</sup> ft <sup>3</sup>	RATING
Utility/large industrial boilers (>100) (1-01-006-01, 1-01-006-04)	ND <sup>e</sup>	ND	NA	28 <sup>f</sup>	1.7 <sup>f</sup>	C
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05	D	92 <sup>g</sup>	5.8 <sup>g</sup>	C
Commercial boilers (0.3 - <10) (1-03-006-03)	1.9 E+06	1.2 E+05	C	128 <sup>h</sup>	8.0 <sup>h</sup>	C
Residential furnaces (No SCC)	2.0 E+06	1.3 E+05	D	180 <sup>h</sup>	11 <sup>h</sup>	D

<sup>a</sup> All factors represent uncontrolled emissions. Units are kg of pollutant/10<sup>6</sup> cubic meters and lb of pollutant/10<sup>6</sup> cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m<sup>3</sup> (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value. NA = not applicable.

<sup>b</sup> SCC = Source Classification Code.

<sup>c</sup> References 10,22-23.

<sup>d</sup> References 9-10,18.

<sup>e</sup> ND = no data.

<sup>f</sup> Reference 8: methane comprises 17% of organic compounds.

<sup>g</sup> Reference 8: methane comprises 52% of organic compounds.

<sup>h</sup> Reference 8: methane comprises 34% of organic compounds.

Table 3.3-2 (English Units). EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES<sup>a</sup>

Pollutant	Gasoline Fuel (SCC 2-02-003-01, 2-03-003-01)		Diesel Fuel (SCC 2-02-001-02, 2-03-001-01)		EMISSION FACTOR RATING
	lb/hp-hr (power output)	lb/MMBtu (fuel input)	lb/hp-hr (power output)	lb/MMBtu (fuel input)	
NO <sub>x</sub>	0.011	1.63	0.031	4.41	D
CO	0.439	62.7	6.68 E-03	0.95	D
SO <sub>x</sub>	5.91 E-04	0.084	2.05 E-03	0.29	D
PM-10 <sup>b</sup>	7.21 E-04	0.10	2.20 E-03	0.31	D
CO <sub>2</sub> <sup>c</sup>	1.09	155	1.16	165	B
Aldehydes	4.85 E-04	0.07	4.63 E-04	0.07	D
TOC					
Exhaust	0.015	2.10	2.47 E-03	0.35	D
Evaporative	6.61 E-04	0.09	0.00	0.00	E
Crankcase	4.85 E-03	0.69	4.41 E-05	0.01	E
Refueling	1.08 E-03	0.15	0.00	0.00	E

<sup>a</sup> References 1,3,6. When necessary, the average brake-specific fuel consumption (BSFC) value used to convert from lb/MMBtu to lb/hp-hr was 7,000 Btu/hp-hr. SCC = Source Classification Code.

<sup>b</sup> PM-10 = particulate matter less than or equal to 10  $\mu$ m aerodynamic diameter. All particulate is assumed to be  $\leq 1 \mu$ m in size.

<sup>c</sup> Assumes 100% conversion of carbon in fuel to CO<sub>2</sub> with 87 weight % carbon in diesel, 86 weight % carbon in gasoline, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and gasoline heating value of 20,300 Btu/lb.

**Attachment 007**

**Soil Decontamination Procedure**

**ATTACHMENT #007**  
**Soil Decontamination Procedure**

KleenSoil International, Inc. mobile thermal treatment unit treats soils to the extent necessary to meet the criteria for clean soil established by Rule 62-775.400, FAC. All soil sampling and analysis is conducted in accordance with Rule 62-775.400, FAC.

KleenSoil maintains accurate records of operations on a workday basis; recording all information that is required by Form 62-775.900(2) and (3), FAC. Also, KleenSoil maintains all records required by AO16-231440. The records are maintained for a period of three years at KleenSoil's Palmetto, Florida location. FDEP has complete access to all records.

Prior to thermally processing soil, KleenSoil screens all soil and other debris to assure that all materials entering the thermal treatment unit consist of particles no more than 2-inches in diameter.

All sampling and analysis required of KleenSoil is conducted pursuant to Rule 62-775.300(10), FAC. Soil sampling will be conducted by KleenSoil personnel using procedures that are in accordance with the *Quality Assurance Standard Operating Procedures Manual for Soil thermal Treatment Facilities*, 1991. Analysis of soil samples are conducted by a qualified laboratory that has an approved Quality Assurance Plan under 62-160, FAC.

**CRITERIA FOR CLEAN SOIL (62-775.400, FAC)**

Soil that has been processed by KleenSoil meets the following criteria:

1. Total volatile organic aromatics  $\leq 100 \mu\text{g}/\text{kg}$ .
2. Total recoverable petroleum hydrocarbons  $\leq 10 \text{ mg}/\text{kg}$   
or  
 $\leq 50 \text{ mg}/\text{kg}$  if polynuclear aromatic hydrocarbons  $\leq 1 \text{ mg}/\text{kg}$   
and volatile organic halocarbons  $\leq 50 \mu\text{g}/\text{kg}$ .
3. Metals

Metal	Maximum Concentration TCLP (mg/l)	Maximum Concentration Total (mg/kg)
Arsenic	5.0	10
Barium	100.0	4940
Cadmium	1.0	37
Chromium	5.0	50
Lead	5.0	108
Mercury	0.2	23
Selenium	1.0	389
Silver	5.0	353

Both the temperature and the residence time of the soil in the kiln are varied to assure that organic contaminants are reduced to a level at or below those defined above. Under no circumstances does KleenSoil blend hazardous materials with any soils being processed.

KleenSoil may blend nonhazardous soils prior to treatment to achieve the total metals criteria of this rule provided the pre-blended soils do not exhibit the characteristics of toxicity for those metals. Uncontaminated soils are not used for blending purposes.

KleenSoil maintains records of the blending procedures, reporting blending ratios and concentrations of metals in the blending soils to estimate total metals concentrations in the blended soil.

### **PRETREATMENT ANALYSIS**

No contaminated soils are processed prior to receipt of analyses and laboratory certifications, and on-site screening by KleenSoil personnel. This ensures compliance with all applicable permitting criteria. All soils received for thermal treatment are precertified by an outside laboratory which test to ensure that they are non-hazardous under 40 CFR 261 and that they do not exceed state mandated limits.

KleenSoil requires that all contaminated soils presented for thermal treatment be analyzed in accordance with Rule 62-775, FAC, by a laboratory with an approved Comprehensive Quality Assurance Plan.

Before soils are accepted for thermal treatment, each sample is usually analyzed by the generator for the following parameters:

- Total Volatile Organic Aromatics
- Total Recoverable Petroleum Hydrocarbons
- Volatile Organic Hydrocarbons
- Total Metals: (arsenic, barium, cadmium, chromium, lead, mercury, selenium, & silver)

KleenSoil provides all potential customers with a copy of a *Contaminated Soil Pre-Burn Requirements Form* which identifies the pretreatment tests required before receipt of soil. A *Contaminated Soil Generator Certification Form* must be provided to KleenSoil by all generators certifying the type of contaminant in the soil, certifying that the soil is not hazardous and certifying that the required pre-treatment analyses have been conducted.

KleenSoil will not thermally process any soil that is classified as a hazardous waste. If the soil is suspected of containing a hazardous waste (as indicated by pre-treatment metals analysis, visual screening upon receipt and/or information provided by the generator), additional screening analyses, including but not limited to the following, may be conducted:

- Volatile organic halogens
- Corrosivity
- Reactivity
- TCLP for metals, pesticides and other organics (EPA Method 8010)
- PCB

If the contaminated soil is not suspected of containing hazardous waste but is known to contain used oil, KleenSoil will require tests for total organic halides and PCBs in addition to the pre-treatment analyses specifically required by Rule 62-775.410, FAC. Changes in analytical requirements that result from amendments to Chapter 62-775 will be incorporated by reference into this protocol.

If the results of any analyses indicated a soil does not meet the requirements of KleenSoil and Rules of Chapter 562-775, FAC, KleenSoil will not approve the soil for thermal treatment.

#### **Receiving, Handling, and Stockpiling (62-775.620, FAC)**

Each batch of contaminated soil offered to KleenSoil is pretested in accordance to Rule 62-775.410, FAC. If the contaminated soil is determined to be hazardous or does not otherwise comply with requirements of this rule, the soil is not approved for thermal treatment by KleenSoil.

Once the results of the pretreatment analyses have been reviewed and the contaminated soil has been determined to be acceptable for treatment, the unprocessed contaminated soil is stored under waterproof covers to minimize unconfined emissions of petroleum products.

The contaminated soil to be processed is dumped by loader over a scalping grid onto an inclined conveyor and then screened at the top of the conveyor. The screened soil is removed from the pile at the bottom of the conveyor and thermally processed in the rotary kiln. The exhaust gases of the kiln pass through a baghouse and then into an afterburner where hydrocarbons are oxidized. Samples are taken and analyzed from the processed soil to ascertain that the processed soil meets FDEP criteria for clean soil as defined in Rule 62-775, FAC. After passing the required tests, the processed soil is returned back into the excavation site or sold as "clean fill" on the open market. In the event that the processed soil does not meet the clean soil requirements, it is reprocessed.

## CONTAMINATED SOIL PRE-BURN REQUIREMENTS

### 1. Required Tests and Maximum Limits:

<u>Parameter/Property</u>	<u>Maximum Limit/Conditions</u>
TOTAL Arsenic (As)	10 ppm
TOTAL Barium (Ba)	4940 ppm
TOTAL Cadmium (Cd)	37 ppm
TOTAL Chromium (Cr)	50 ppm
TOTAL Lead (Pb)	108 ppm
TOTAL Mercury (Hg)	23 ppm
TOTAL Selenium (Se)	389 ppm
TOTAL Silver (Ag)	353 ppm
TRPH (Method 9073)	No Limit
VOA (Method 8020)	No Limit

### 2. Number of Samples for Above Tests:

< 140 Tons	1
140 to 699 Tons	3
700 to 1399 Tons	5
Each Additional 700 Tons	3

### 3. Other General Requirements (2)

- a. Letter from Generator or Generator's Authorized Representative:
  - i. Soil is NOT a Hazardous Waste or mixed with Hazardous Waste
  - ii. Type of Contamination (gas, diesel, etc.)
  - iii. Source of Contamination (UST, spill, etc.)
- b. Copy of all pre-burn analyses.

### 4. Notes:

- (1) Higher metal levels may be acceptable, subject to results of TCLP analysis.
- (2) Total organic halides and PCB analyses required for all use oils.

**Contaminated Soil Generator Certification**

**Generator's Name:** \_\_\_\_\_

**Site Name:** \_\_\_\_\_

**Site Address:** \_\_\_\_\_

**City, State, Zip:** \_\_\_\_\_

We hereby certify and attest that, to the best of our knowledge, the petroleum contaminated soil from the above-referenced site:

1. Was contaminated by: \_\_\_\_\_ (gas/ diesel, etc.)
2. Was contaminated from an above ground spill or leak. Yes \_\_\_ No \_\_\_
3. Is petroleum contaminated media subject to RCRA UST clean-up regulations under Title 40 CFR, part 280. Yes \_\_\_ No \_\_\_
4. Is NOT a Hazardous Waste as defined by State or Federal Regulations including, but not limited to Chapter 40 CFR, part 261.
5. Does NOT contain Pesticides, Herbicides or PCB's at a level over State or Federal regulatory limits, which would cause the soil to be considered hazardous.
6. Was sampled for pre-burn analysis using the sampling and composting procedures defined in Ch. 62-775.300(10) and 62-775.410, FAC.

\_\_\_\_\_, 199\_\_\_\_  
Generator/Agent and Title (print or type)                      Date

\_\_\_\_\_  
Signature



**Attachment 008**

**Particulate Matter Emissions Measurements dated August 15, 1991**

PARTICULATE MATTER  
EMISSION MEASUREMENTS

MOBILE SOIL REMEDIATION UNIT

D.R.E. ENVIRONMENTAL, INC.  
MT. VERNON, ALABAMA

August 15, 1991

KOGLER & ASSOCIATES  
ENVIRONMENTAL SERVICES  
4014 N.W. 13TH STREET  
GAINESVILLE, FLORIDA 32609  
(904) 377-5822



## 1.0 INTRODUCTION

On August 15, 1991, Koogler & Associates Environmental Services of Gainesville, Florida conducted particulate matter emission measurements on a mobile soil remediation unit for D.R.E. Environmental, Inc., while it was processing contaminated soil at a location in Mt. Vernon, Alabama.

Particulate matter emission measurements and visible emissions observations were made in accordance with EPA Methods 5 and 9, respectively, as described in 40CFR60, Appendix A. Particulate matter emission measurements ranged from 4.46 to 4.85 pounds per hour and averaged 4.61 pounds per hour. A summary of the particulate matter emissions, gas flow and stack parameters is presented in Table 1. During a 30-minute observation period, no visible emissions were noted.

During the test period on August 15, 1991, the input rate to the dryer averaged 15.4 tons per hour. The allowable particulate matter concentration in the stack gas is 0.08 grains per dry standard cubic foot, corrected to 50 percent excess air, or about 7.1 pounds per hour. Therefore, based on the above data, it can be concluded that the mobile soil remediation unit meets the particulate matter emission limits established by permit conditions.

## 2.0 PROCESS DESCRIPTION

D.R.E. Environmental, Inc. owns and operates a 35 TPH portable rotary kiln/afterburner system to decontaminate soil. The unit consists of a soil feed hopper, a 25 MMBTU/hr rotary kiln, a baghouse, a 22 MMBTU/hr afterburner, a propane/natural gas fuel system, a diesel electric generator, and associated equipment.

Contaminated soils pass through a kiln where the VOCs are evaporated. The gas stream leaving the kiln passes through a baghouse and an afterburner for control of particulate matter and VOC emissions.

Propane gas is the primary fuel and natural gas is the alternate fuel for both the kiln and afterburner. The maximum heat input to the rotary kiln/afterburner system is 45 MMBTU/hr (500 gallons of propane per hour).

Contaminated soils are reduced to lumps that are a maximum of two inches in diameter prior to being fed to the kiln. The soil is heated to about 700<sup>0</sup>F in the kiln to evaporate the petroleum products. The gas stream then passes through a baghouse which removes particulate matter, and into an afterburner to control the petroleum vapors. The afterburner operates at a minimum temperature of 1600<sup>0</sup>F and a minimum residence time of one second.

The stack from the afterburner is three feet in diameter and approximately 30 feet high. Two sampling ports are located at 90 degrees to one another, as shown in Figure 1.

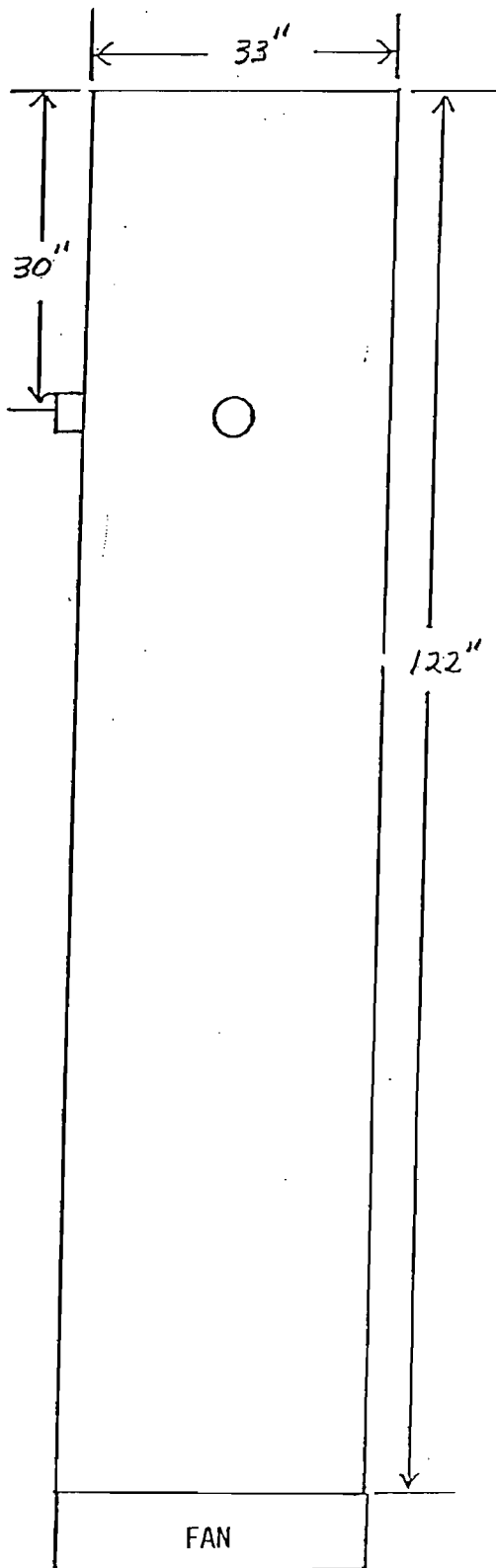


FIGURE 1  
 SAMPLING POINT LOCATIONS  
 TRANSPORTABLE INCINERATOR SYSTEM  
 D.R.E. ENVIRONMENTAL, INC.

<u>Traverse Point No.</u>	<u>Inches Inside Stack Wall</u>
1	1.00
2	2.21
3	3.93
4	5.84
5	8.25
6	11.76
7	21.12
8	24.75
9	27.06
10	29.04
11	30.69
12	32.00



### 3.0 FIELD AND ANALYTICAL PROCEDURES

Particulate matter emission measurements were made using EPA Method 5, as described in 40CFR60, Appendix A. The sampling point locations for the EPA Method 5 test were established in accordance with EPA Method 1.

Stack gas velocity measurements and stack gas moisture measurements were made in conjunction with the EPA Method 5 tests in accordance with EPA Methods 2 and 4, both as described in 40CFR60, Appendix A.

#### 4.0 SUMMARY OF RESULTS

Results of the particulate matter emission measurements conducted on the mobile soil remediation unit on August 15, 1991 are summarized in Table 1. The particulate matter concentration in the stack gas during the three tests averaged 0.0525 grains per dry standard cubic foot, corrected to seven percent oxygen, and the mass emission rate averaged 4.61 pounds per hour. The stack gas flow rate averaged 11092 SCFMD, the stack gas temperature averaged 1412<sup>o</sup>F and the stack gas moisture averaged 28.1 percent. During the test period, the input rate to the dryer averaged 15.4 tons per hour. The permit for the soil remediation unit limits the particulate matter concentration in the stack gas to 0.08 grains per dry standard cubic foot, corrected to 50 percent excess air; equivalent to a mass emission rate of about 7.1 pounds per hour.

Therefore, based on the above data, it can be concluded that the mobile soil remediation meets the permitted particulate matter emission limits.

All calculations, field and analytical data sheets, plant operating data, equipment calibrations and a list of project participants are included in the Appendix of this report.

TABLE 1

## SUMMARY OF SOURCE EMISSION TEST DATA

D.R.E. ENVIROMENTAL INC.  
 BAGHOUSE/AFTERBURNER  
 AUGUST 15, 1991

Run No.	Process Weight Rate (Tons/Hr)	Stack Gas Flow Rate (SCFMD)	Stack Gas Temperature (Deg F)	Stack Gas Moisture (%)	Particulate Matter	
					Conc. (gr/dscf@ 50% excess air)	Emission Rate (Lbs/Hr)
1	15.0	11129	1388.0	29.1	0.0474	4.46
2	14.7	10649	1448.0	30.4	0.0476	4.52
3	16.6	11497	1401.0	24.9	0.0570	4.85
Average	15.4	11092	1412.3	28.1	0.0507	4.61

Allowable Particulate Matter Emission Rate = 0.08 gr/dscf @ 50% excess air