

7770029-002-AF



KOGLER & 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
KOGLER & ASSOCIATES

RECEIVED

JUL 2 1996

BUREAU OF
AIR REGULATION



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

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

Dear Ms. Phillips:

← The unit with a current AO

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.

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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

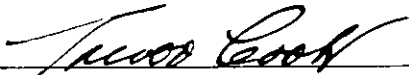
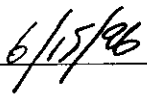
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: KleenSoil International, Incorporated	
2. Site Name: Mobile Soil Remediation Unit #1	
3. Facility Identification Number: <input checked="" type="checkbox"/> Unknown	
4. Facility Location: (Mobile Unit) 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:	7-2-96
2. Permit Number:	777002A-003-AE
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: Trevor Cook, Vice President
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: KleenSoil International, Incorporated Street Address: 13838 Harlee Road City: Palmetto State: Florida Zip Code: 34221
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 723-1600 Fax: (941) 772-7743
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: \$ _____ [X] 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: John B. Koogler, Ph.D., P.E. Registration Number: 12925
2. Professional Engineer Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 N.W. 13th Street City: Gainesville State: FL Zip Code: 32609
3. Professional Engineer Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158

4. Professional Engineer Statement:

I, 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

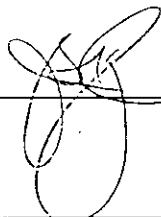
(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions 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 [X] 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: <p style="text-align: center;">Mark Hagmann-Project Engineer</p>
2. Application Contact Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 N.W. 13th Street City: Gainesville State: Florida Zip Code: 32609
3. Application Contact Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158

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: Mobile Unit Zone: East (km): North (km):			
2. Facility Latitude/Longitude: Mobile Unit Latitude (DD/MM/SS): Longitude (DD/MM/SS):			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 16	6. Facility SIC(s): 1622
7. Facility Comment (limit to 500 characters): 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.			

Facility Contact

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

Facility Regulatory Classifications

1. Small Business Stationary Source? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown
2. Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Synthetic Non-Title V Source? <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input type="checkbox"/> Yes <input checked="" 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): This facility will no longer be classified as a Title V source once HAPs are limited below the applicable Title V threshold. However, until HAP emissions are limited the facility is subject to Title V.

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 Category 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;">All pollutants are reported in the emissions unit information section.</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:

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): Mobile Soil Thermal Treatment Unit		
2. Emissions Unit Identification Number: [] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code: 16
6. Emissions Unit Comment (limit to 500 characters): 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.		

Emissions Unit Control Equipment

A.

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

Emissions Unit Information Section 1 of 1

B.

1. Description (limit to 200 characters):

Direct-Flame Afterburner

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

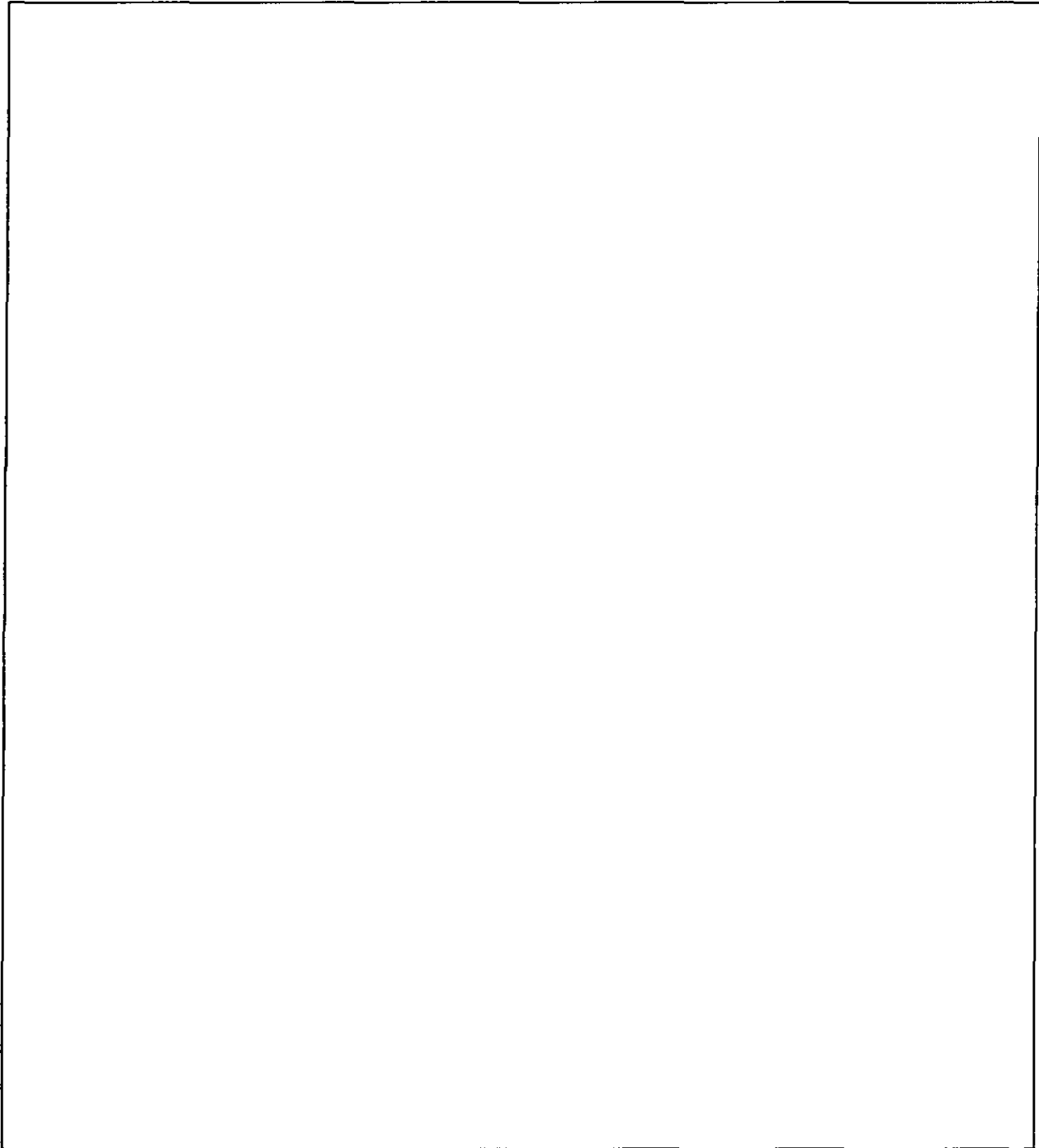
C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

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

1. Identification of Point on Plot Plan or Flow Diagram: Attachment 001-Final Exhaust
2. Emission Point Type Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" 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 1

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

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

Segment Description and Rate: (2 of 4)

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

Segment Description and Rate: (3 of 4)

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

Segment Description and Rate: (4 of 4)

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

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

Pollutant Detail Information: 1 of 5

1. Pollutant Emitted: PM		
2. Total Percent Efficiency of Control: 98 %		
3. Potential Emissions:	7.4 lb/hour	32.4 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 7.4 lb/hr and 32.4 tons/yr Reference: AC16-187650A, SC No. 11		
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): NA		
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: Rule		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA		
4. Equivalent Allowable Emissions:	7.4 lb/hour	32.4 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Rule Basis: 62-296.415(2)(a), F.A.C.		

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: CO		
2. Total Percent Efficiency of Control:	NA	%
3. Potential Emissions:	9.42 lb/hour	41.2 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 100 ppm CO/ft³ gas x (28/385) lb CO/ft³ for Dryer and Afterburner Reference: Rule 62-296.415(1)(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 ⁻⁶) CO/ft ³ x (28/385) lb CO/ft ³ x 60 min/hr = 9.42 lbs/hr 9.42 lbs/hr x 8760 hrs/yr x ton/2000 lbs = 41.25 tons/yr		
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: Rule		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA		
4. Equivalent Allowable Emissions:	9.42 lb/hour	41.2 tons/year
5. Method of Compliance (limit to 60 characters): 62-297.500, F.A.C.		
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):		

Pollutant Detail Information: 3 of 5

1. Pollutant Emitted: VOC		
2. Total Percent Efficiency of Control: 99 %		
3. Potential Emissions:	9.42 lb/hour	61.3 tons/year
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 20,000 PPM VOC Reference: Based on material balance analysis		
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) = 14.0 lbs/hr 14.0 lbs/hr x 8760 hrs/yr x ton/2000 lbs = 61.32 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: Other		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA		
4. Equivalent Allowable Emissions:	14.0 lb/hour	61.3 tons/year
5. Method of Compliance (limit to 60 characters): 62-297.410, F.A.C.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): AC16-187650A		

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: 4 of 5

1. Pollutant Emitted: SO2		
2. Total Percent Efficiency of Control:	NA	%
3. Potential Emissions:	15.4 lb/hour	67.6 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: (0.003 x 2) lb/SO₂/lb fuel Reference: Stoichiometry		
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): $343.2 \text{ gal/hr} \times 7.5 \text{ lb/gal} \times (0.003 \times 2) \text{ lb/SO}_2 \text{ lb fuel} = \mathbf{15.4 \text{ lb/hr}}$ $15.4 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = \mathbf{67.6 \text{ tons/yr}}$		
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: Other		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA		
4. Equivalent Allowable Emissions:	15.4 lb/hour	67.6 tons/year
5. Method of Compliance (limit to 60 characters): Certified Fuel Analysis		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): AC16-187650A		

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: 5 of 5

1. Pollutant Emitted: H017 (Benzene)		
2. Total Percent Efficiency of Control: %		
3. Potential Emissions:	2.28 lb/hour	10.0 tons/year
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 2.28 lb/hr and 10.0 tons/yr Reference: AC16-187650A, SC No. 5		
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): NA		
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: Other		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA		
4. Equivalent Allowable Emissions:	2.28 lb/hour	10 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): Basis: AC16-187650A		

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

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Manufacturer: Thermal Environmental Instruments Model Number: 48 (Thermo Electron) Serial Number: NA	
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: <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)**

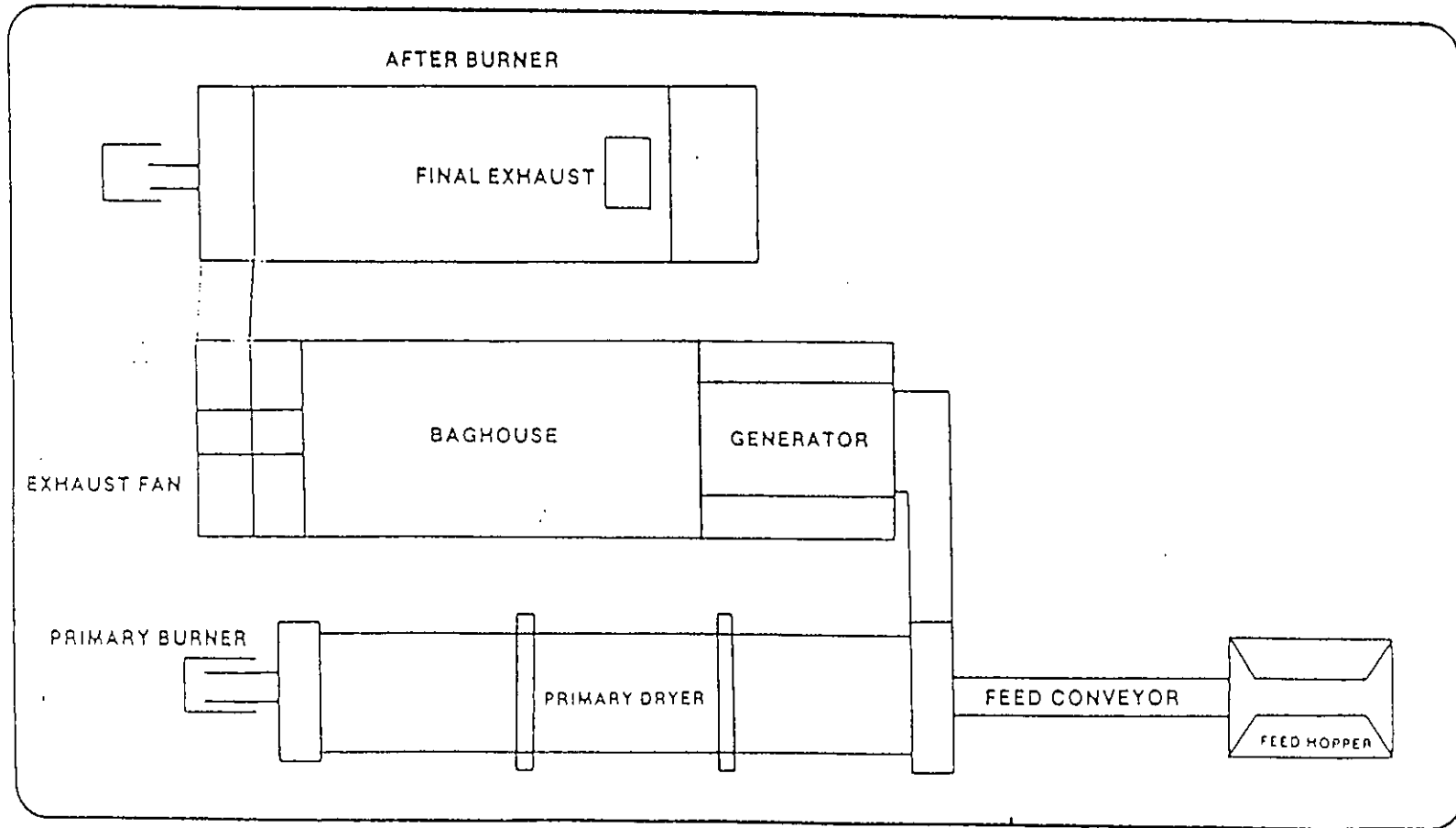
Supplemental Requirements for All Applications

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
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 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 ³	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 ft²



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


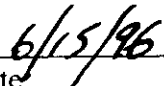
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: KleenSoil International, Incorporated	
2. Site Name: Mobile Soil Remediation Unit #1	
3. Facility Identification Number: <input checked="" type="checkbox"/> Unknown	
4. Facility Location: (Mobile Unit) 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: Trevor Cook, Vice President
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: KleenSoil International, Incorporated Street Address: 13838 Harlee Road City: Palmetto State: Florida Zip Code: 34221
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 723-1600 Fax: (941) 772-7743
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: 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: \$ _____

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

4. Professional Engineer Statement:

I, 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

* Attach any exception to certification statement.

Application Contact

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

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: Mobile Unit Zone: _____ East (km): _____ North (km): _____			
2. Facility Latitude/Longitude: Mobile Unit Latitude (DD/MM/SS): _____ Longitude (DD/MM/SS): _____			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 16	6. Facility SIC(s): 1622
7. Facility Comment (limit to 500 characters): 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.			

Facility Contact

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

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): This facility will no longer be classified as a Title V source once HAPs are limited below the applicable Title V threshold.

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
then major or SM*

1. Pollutant Emitted	2. Pollutant Classification
VOC	SM ^{PM}
HAPS	SM
CO	
SO ₂	
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): <p style="text-align: center;">All pollutants are reported in the emissions unit information section.</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:

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): Mobile Soil Thermal Treatment Unit		
2. Emissions Unit Identification Number: [] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code: 16 49
6. Emissions Unit Comment (limit to 500 characters): 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. 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.		

Emissions Unit Control Equipment

A.

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

B.

1. Description (limit to 200 characters):

Direct-Flame Afterburner

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

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C.

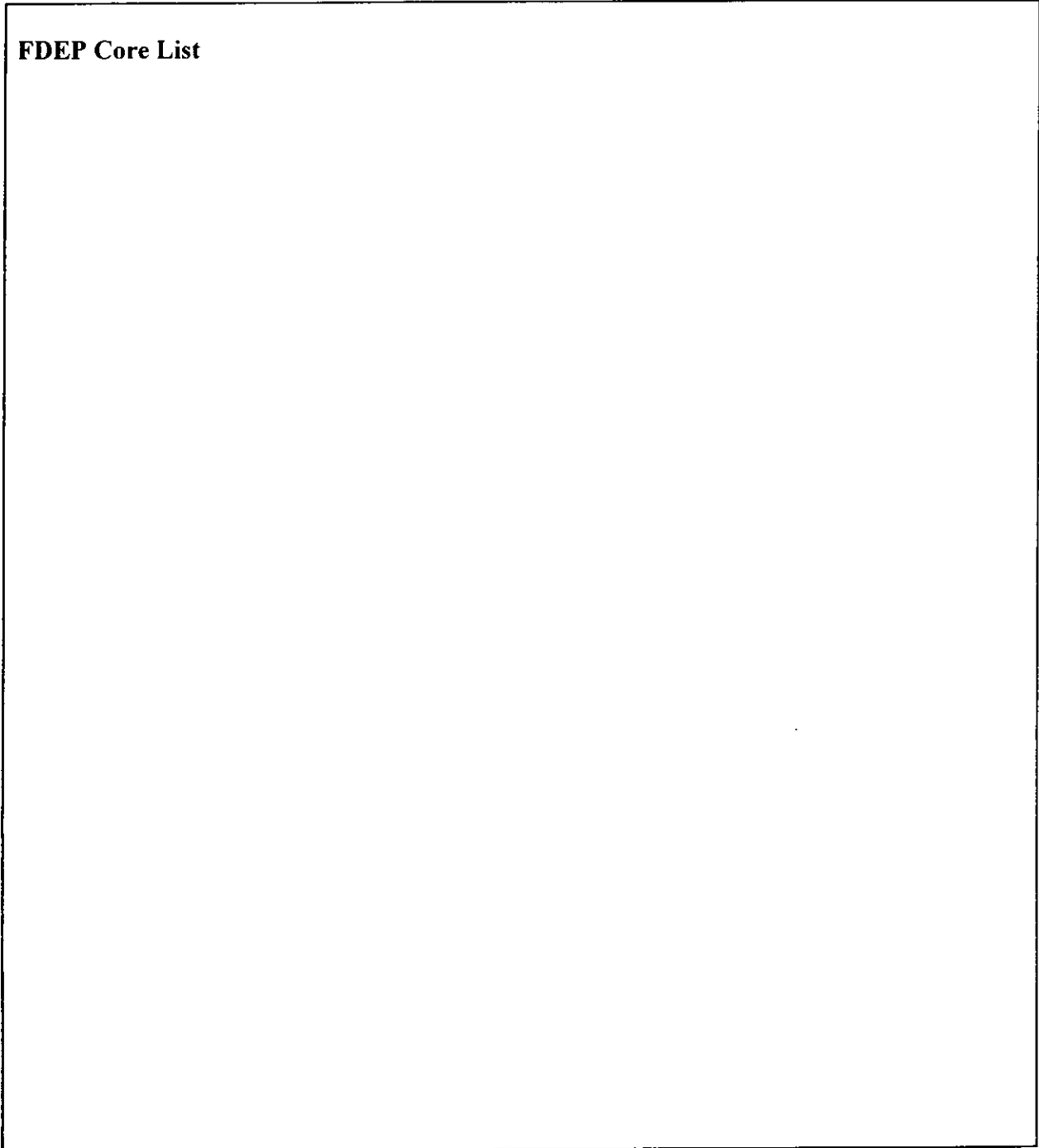
1. Description (limit to 200 characters):

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



**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: Attachment 001-Final Exhaust
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" 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: 1500 °F

Emissions Unit Information Section 1 of 1

9. Actual Volumetric Flow Rate: 34,325 acfm		<i>std P</i>
10. Percent Water Vapor : 25 %		
11. Maximum Dry Standard Flow Rate: 21,583 dscfm		<i>68°F std P</i>
12. Nonstack Emission Point Height: NA		feet
13. Emission Point UTM Coordinates:		
Zone:	East (km): <i>OPTIONAL</i>	North (km):
14. Emission Point Comment (limit to 200 characters):		
<p>Maximum dry standard flow rate is based on back-calculating from PM emission limit.</p> <p><i>0.30</i> $7.4 \text{ lbs/hr} / 0.04 \text{ gdscf} \times 7,000 \text{ grains/lb} / 60 \text{ min/hr} = 21,583 \text{ dscfm}$</p> <p><i>hr</i> <i>gr/lb</i> <i>hr</i> <i>min</i> <i>hr</i> <i>hr</i></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): Solid Waste Disposal/Industrial/Incineration/Single Chamber (Petroleum Contaminated Soil)	
2. Source Classification Code (SCC): 5-03-001-02 ✓	
3. SCC Units: Tons Burned ✓	
4. Maximum Hourly Rate: 35.0 tons burned per hour	5. Maximum Annual Rate: 306,600 tons burned per year
6. Estimated Annual Activity Factor: N/A	
7. Maximum Percent Sulfur: N/A	8. Maximum Percent Ash: N/A
9. Million Btu per SCC Unit: N/A	
10. Segment Comment:	

Segment Description and Rate: (2 of 4)

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

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

$$\frac{1.96}{14} = 0.14 \frac{1000 \text{ gal water}}{\text{hr}} = 115.6 \frac{1000 \text{ gal}}{\text{yr}}$$

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

Segment Description and Rate: (3 of 4)

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): In-Process Fuel: Distillate Oil (# 2 Diesel)	
2. Source Classification Code (SCC): 3-90-005-89	
3. SCC Units: 1000 Gallons Burned	
4. Maximum Hourly Rate: 0.332 Thousand Gallons Burned	5. Maximum Annual Rate: 2,911.4 Thousand Gallons Burned
6. Estimated Annual Activity Factor: NA	
7. Maximum Percent Sulfur: ***See Attachment 003***	8. Maximum Percent Ash: NA
9. Million Btu per SCC Unit: 141.0	
10. Segment Comment: $p. 20 \quad \frac{46.86 \frac{mmBtu}{hr}}{141 \frac{mmBtu}{1000 gal}} = 0.332 \frac{1000 gal}{hr} = 2911.3 \frac{1000 gal}{year}$	

Segment Description and Rate: (4 of 4)

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): In-Process Fuel: Natural Gas	
2. Source Classification Code (SCC): 3-90-006-89	
3. SCC Units: 1 Million Cubic Feet Burned	
4. Maximum Hourly Rate: 0.045 Million Cubic Feet Burned	5. Maximum Annual Rate: 394.2 Million Cubic Feet Burned
6. Estimated Annual Activity Factor: NA	
7. Maximum Percent Sulfur: NA	8. Maximum Percent Ash: NA
9. Million Btu per SCC Unit: 1000	
10. Segment Comment: NA $\frac{45 \text{ MMTU}}{\text{hr}} = \frac{1000 \text{ MMbtu}}{\text{MMSCF}} = 0.045 \frac{\text{MMSCF}}{\text{hr}}$ $\frac{1.06}{141} = 0.013 \frac{1000 \text{ gal}}{\text{hr}} = 115.6 \frac{1000 \text{ gal No.2}}{\text{hr}}$	

**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	NS EL
ethyl benzene? HAPS			
fugitives?			

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

Pollutant Detail Information: 1 of 4

1. Pollutant Emitted: PM		
2. Total Percent Efficiency of Control: 98 %		
3. Potential Emissions:	7.98 lb/hour	34.9 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 0.04 grains/dscf Reference: Process Knowledge <i>limit in Rule</i>		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <i>not an alternative in rule</i> <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters): Emissions from kiln/afterburner: 13.95 ← $(45 \text{ min/hr}) / (.31 \text{ lb/dscf})$ $21,583 \text{ dscfm} \times 0.04 \text{ gdscf} \times 11\text{lb}/7,000 \text{ grains} \times 60 \text{ min/hr} = 7.4 \text{ lbs/hr}$ <i>see p. 24</i> $7.4 \text{ lbs/hr} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 32.4 \text{ tons/yr}$ Generator: $1.86 \text{ mmBtu/hr from diesel fuel} \times 0.31 \text{ lb-PM/mmBtu} = 0.58 \text{ lbs/hr}$ <i>AP-42?</i> $0.58 \text{ lbs PM/hr} \times 8760 \text{ hrs}/2000 \text{ lbs} = 2.53 \text{ tons/}$		
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: Rule		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA <i>0.04 gvdscf</i>		
4. Equivalent Allowable Emissions:	<i>7.4 lb/hour</i>	32.4 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5 <i>62-296.415-62-204.900</i>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Rule Basis: 62-296.415(2)(a), F.A.C. <i>by facility</i> 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. <i>w/ing 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: CO		
2. Total Percent Efficiency of Control: NA	%	
3. Potential Emissions:	11.19 lb/hour	48.95 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 100 ppm CO/ft³ gas x (28/385) lb CO/ft³ for Dryer and Afterburner Reference: Rule 62-296.415(1)(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>Emissions from kiln/afterburner:</p> <p>21,583 dscfm x 60 min/hr x (100x10⁻⁶) CO/ft³ gas x (28/385) lb CO/ft³ = 9.42 lbs/hr 9.42 lbs CO/hr x 8760 hrs/2000 lbs = 41.25 tons/yr</p> <p><i>Handwritten notes:</i> $\frac{n}{v} = \frac{p}{RT}$, 379, $\left(\frac{ft^3}{min}\right) \times \left(\frac{min}{hr}\right) \times \left(\frac{1}{ft^3}\right) \times \left(\frac{lb}{ft^3}\right) =$</p>		
<p>Generator:</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 = 7.7 tons/yr</p> <p style="text-align: right;"><i>Handwritten note:</i> EMISSION FRACTION</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: Rule		
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): 62-297.500, F.A.C. <i>METHOD 10 62-204.000</i>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Rule Basis: 62-296.415(1)(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. (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: VOC		
2. Total Percent Efficiency of Control: 99 %		
3. Potential Emissions:	14.65 lb/hour	64.2 tons/year
<i>X.11 HAPs</i>		
<i>7.06</i>		
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: 1,400 lb/hr VOC in Soil x Efficiency Reference: Based on material balance analysis		
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): (Afterburner destruction efficiency of 99% min.) From soil: <i>20,000 ppm VOC</i> <i>35 tons/yr (2000 lb/ton) (20,000 / 10,000,000) = 1400 lb/hr</i> 1,400 lb/hr VOC in Soil x (1-.99) = 14.0 lbs/hr 14.0 ^{lbs} tons/hr VOC x 8,760 hrs/yr / 2,000 lb/ton = 61.3 tons/yr From generator: <i>check</i> 1.86 mmBtu/hr from diesel fuel x 0.35 lb VOC/mmBtu = 0.65 lbs/hr 0.65 lbs VOC/hr x 8760 hrs/2000 lbs = 2.85 tons/yr		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): This pollutant is synthetically limited based on limiting contaminant level in soil. <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: Other		
2. Future Effective Date of Allowable Emissions: NA		
3. Requested Allowable Emissions and Units: NA		
4. Equivalent Allowable Emissions:	14.0 lb/hour	61.3 tons/year
5. Method of Compliance (limit to 60 characters): 62-297,410, F.A.C. <i>401? 62-204 METHOD 25</i>		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <p style="text-align: center;">AC16-187650A</p> <p style="text-align: center;">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.</p>		

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: SO2		
2. Total Percent Efficiency of Control: NA	%	
3. Potential Emissions:	15.4 lb/hour	67.6 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: NA <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
6. Emission Factor: (0.003 x 2) lb/SO₂/lb fuel Reference: Stoichiometry		
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): <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <p>From Drum/Afterburner:</p> <p>0.319 ^{lot} gal/hr x 7.5 lb/gal x (0.003 x 2) lb/SO₂ lb fuel = 14.36 lb/hr</p> <p>14.36 lbs/hr x 8760 hrs/yr x ton/2000 lbs = 62.9 tons/yr</p> <p>From Generator:</p> <p>1.86 mmBtu/hr from diesel fuel x 0.29 lb SO₂/mmBtu = 0.54 lbs/hr</p> <p>0.54 lbs SO₂/hr x 8760 hrs/2000 lbs = 2.36 tons/yr</p> </div> <div style="width: 35%; font-family: cursive;"> <p>from p. 27</p> <p>W. 60% 0.332 1700 gal/hr #2</p> <p>2911.4 1000 gal/hr</p> <p>14.94 lb/hr</p> <p>65.44</p> </div> </div>		
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: Other		
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): Certified Fuel Analysis		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): AC16-187650A <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: VE5
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: 5 % Maximum Period of Excess Opacity Allowed: 0 min/hour
4. Method of Compliance: EPA Method 9 (30-minutes, @ exhaust of afterburner)
5. Visible Emissions Comment (limit to 200 characters): <p style="text-align: center;">Basis: 62-296.415(2)</p> <p style="text-align: center;">This opacity limitation applies to the final exhaust stack</p>

general ?

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.

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)**

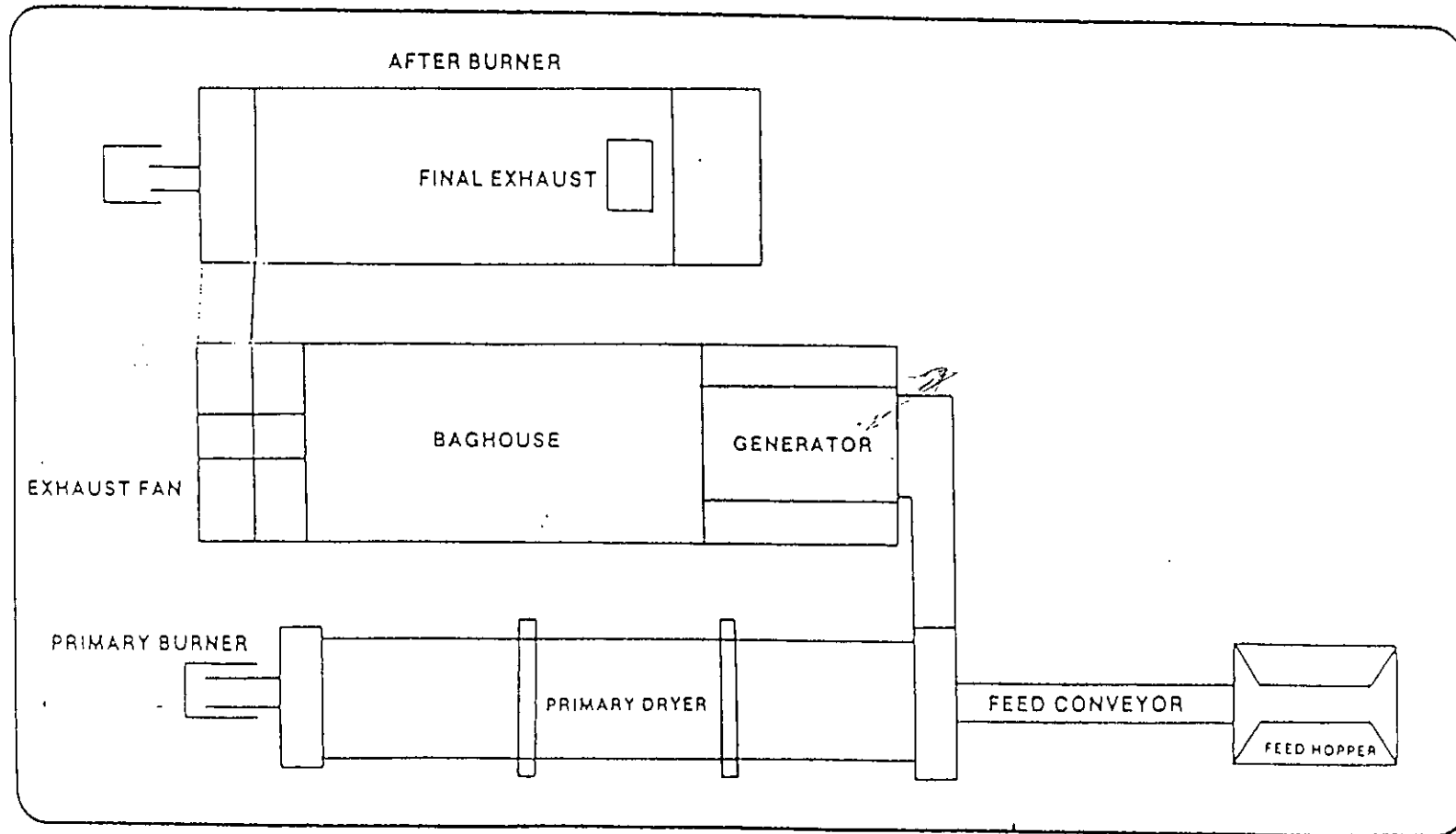
Supplemental Requirements for All Applications

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>samples put 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: 005-DEP MEMO <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 

	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 ³	7.5	5.0
Heat Capacity (BTU/gal)	1,000 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: 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 ^a	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
TOTAL HAPS^b	2.0	4.8	11.0

^a 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.

^b 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.