

**AJAX PAVING
INDUSTRIES, INC.**

**Portable BCE Asphalt
Producing Facility**

*FDEP "Statewide" Operation Permit Application
Construction Permit No. 777060-003-AC*

JULY-2000

July 29th



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - NON-TITLE V SOURCE

See Instructions for Form No. 62-210.900(3)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: AJAX PAVING INDUSTRIES, INC.	
2. Site Name: AJAX PAVING INDUSTRIES, INC. – PORTABLE PLANT	
3. Facility Identification Number: 777060 [] Unknown	
4. Facility Location: (Present Location – Relocatable Plant) Street Address or Other Locator: 1740 U.S. 27 South City: Moore Haven County: Glades Zip Code: 33471	
5. Relocatable Facility? [X] Yes [] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: Mr. Bernard A. Ball, Jr., Director of Environmental Services	
2. Application Contact Mailing Address: Organization/Firm: Central Florida Testing Laboratories, Inc. Street Address: 12625 – 40th Street North City: Clearwater State: Florida Zip Code: 33762	
3. Application Contact Telephone Numbers: Telephone: (727) 572-9797 Fax: (727) 299-0023	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	7770060-006-A0

Purpose of Application

Air Operation Permit Application

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

- Initial non-Title V air operation permit for one or more existing, but previously unpermitted, emissions units.
- Initial non-Title V air operation permit for one or more newly constructed or modified emissions units.

Current construction permit number: 7770060-003-AC

- Non-Title V air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number: _____

Operation permit number to be revised: _____

- Initial non-Title V 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):

- Non-Title V 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 number to be revised: _____

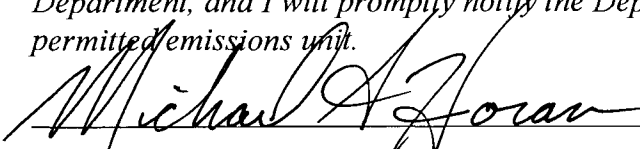
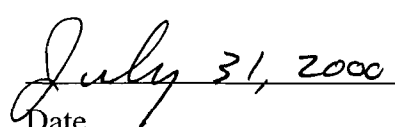
Reason for revision: _____

Air Construction Permit Application

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

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

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative: Mr. Michael Horan, President
2. Owner/Authorized Representative Mailing Address: Organization/Firm: Ajax Paving Industries, Inc. Street Address: 510 Gene Green Road City: Nokomis State: Florida Zip Code: 34275-3624
3. Owner/Authorized Representative Telephone Numbers: Telephone: (941) 486-3600 Fax: (941) 486-3500
4. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative* of the facility addressed in this application. 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.

Professional Engineer Certification

1. Professional Engineer Name: Mr. George C. Sinn, Jr., P.E. Registration Number: 16911
2. Professional Engineer Mailing Address: Organization/Firm: Central Florida Testing Laboratories, Inc. Street Address: 12625 – 40th Street North City: Clearwater State: Florida Zip Code: 33762
3. Professional Engineer Telephone Numbers: Telephone: (727) 572-9797 Fax: (727) 299-0023

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

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

Date

7-19-00

(seal)

- Attach any exception to certification statement.
- ***With the exception of production and efficiency guarantees by the manufacturer.***

Construction/Modification Information

1. Description of Proposed Project or Alterations:

This project consists of an existing 250 TPH - Portable Bituma Equipment & Engineering Company, Inc. (BCE) Drum Mix Asphalt Plant now located at 1740 U.S. 27 South, Moore Haven, Glades County, Florida and permitted under FDEP Construction Permit No. 7770060-003-AC. This application is for a statewide FDEP Operation Permit for the portable BCE Drum Mix Asphalt Plant for relocation to the counties of Charlotte, Collier, Glades, Hendry, and Lee. Other locations will be requested for later as they are known.

This asphalt producing facility is equipped to burn No. 5 "on-spec" fuel oil in it's plant's burner system with virgin No.2 fuel oil being an alternate fuel, both fuels having a maximum sulfur limit of 0.5% by weight. The emissions from the mixing/drying drum of this plant are controlled by a BCE primary dry cyclone separator followed by a BCE Model 400 baghouse control system rated at 66,000 ACFM and 99.9% efficient by the manufacturer @ 3-4 "Hg of Pressure Drop.

Liquid Asphalt Tanks and the fuel oil used by the plants burner system at this facility are heated as needed by a Gentec/HyWay, Inc. Model 200, oil heating system rated at 2.0 MBtu/hr fired on No.2 virgin diesel fuel with a maximum sulfur content of 0.5% by weight.

This asphalt producing plant also employs a BCE Reclaimed Asphalt Vibrating Screening System used to screen and size reclaimed asphalt material to a desired size before it enters the mixing zone of the rotary drum of this asphalt plant.

This facility as in the past will comply with all FDEP Rules and Regulations for relocatable facilities of this type.

2. Projected or Actual Date of Commencement of Construction: Existing Facility

3. Projected Date of Completion of Construction: Existing Facility

Application Comment:

This project consists of an existing 250 TPH - Portable Bituma Equipment & Engineering Company, Inc. (BCE) Drum Mix Asphalt Plant now located at 1740 U.S. 27 South, Moore Haven, Glades County, Florida and permitted under FDEP Construction Permit No. 7770060-003-AC. This application is for a statewide FDEP Operation Permit for the portable BCE Drum Mix Asphalt Plant for relocation to the counties of Charlotte, Collier, Glades, Hendry, and Lee. Other locations will be requested for later as they are known.

This asphalt producing facility is equipped to burn No. 5 "on-spec" fuel oil in it's plant's burner system with virgin No.2 fuel oil being an alternate fuel, both fuels having a maximum sulfur limit of 0.5% by weight. The emissions from the mixing/drying drum of this plant are controlled by a BCE primary dry cyclone separator followed by a BCE Model 400 baghouse control system rated at 66,000 ACFM and 99.9% efficient by the manufacturer @ 3-4 "Hg of Pressure Drop.

Liquid Asphalt Tanks and the fuel oil used by the plants burner system at this facility are heated as needed by a Gentec/HyWay, Inc. Model 200, oil heating system rated at 2.0 MBtu/hr fired on No.2 virgin diesel fuel with a maximum sulfur content of 0.5% by weight.

This asphalt producing plant also employs a BCE Reclaimed Asphalt Vibrating Screening System used to screen and size reclaimed asphalt material to a desired size before it enters the mixing zone of the rotary drum of this asphalt plant.

This facility as in the past will comply with all FDEP Rules and Regulations for relocatable facilities of this type.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: (Present Location other coordinates not known yet) Zone: 17 East (km): 488.9 E North (km): 2967.9 N			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 26°50'03" N Longitude (DD/MM/SS): 81°06'42" W			
3. Governmental Facility Code: O	4. Facility Status Code: ACTIVE	5. Facility Major Group SIC Code: 2951	6. Facility SIC(s): 2951
7. Facility Comment (limit to 500 characters): <p>This project consists of an existing 250 TPH - Portable Bituma Equipment & Engineering Company, Inc. (BCE) Drum Mix Asphalt Plant now located at 1740 U.S. 27 South, Moore Haven, Glades County, Florida and permitted under FDEP Construction Permit No. 7770060-003-AC. This application is for a statewide FDEP Operation Permit for the portable BCE Drum Mix Asphalt Plant for relocation to the counties of Charlotte, Collier, Glades, Hendry, and Lee. Other locations will be requested for later as they are known.</p> <p>This asphalt producing facility is equipped to burn No. 5 "on-spec" fuel oil in it's plant's burner system with virgin No.2 fuel oil being an alternate fuel, both fuels having a maximum sulfur limit of 0.5% by weight. The emissions from the mixing/drying drum of this plant are controlled by a BCE primary dry cyclone separator followed by a BCE Model 400 baghouse control system rated at 66,000 ACFM and 99.9% efficient by the manufacturer @ 3-4 "Hg of Pressure Drop.</p> <p>Liquid Asphalt Tanks and the fuel oil used by the plants burner system at this facility are heated as needed by a Gentec/HyWay, Inc. Model 200, oil heating system rated at 2.0 MBtu/hr fired on No.2 virgin diesel fuel with a maximum sulfur content of 0.5% by weight.</p> <p>This asphalt producing plant also employs a BCE Reclaimed Asphalt Vibrating Screening System used to screen and size reclaimed asphalt material to a desired size before it enters the mixing zone of the rotary drum of this asphalt plant.</p> <p>This facility as in the past will comply with all FDEP Rules and Regulations for relocatable facilities of this type.</p>			

Facility Contact

1. Name and Title of Facility Contact: Mr. Robert K. Ray, Asphalt Plant Operations Manager		
2. Facility Contact Mailing Address: Organization/Firm: Ajax Paving Industries, Inc. Street Address: 510 Gene Green Road City: Nokomis State: Florida Zip Code: 34272		
3. Facility Contact Telephone Numbers: Telephone: (941) 486-3600 Fax: (941) 486-3500		

Facility Regulatory Classifications

Check all that apply:

1. [] Small Business Stationary Source?	[X] Unknown
2. [X] Synthetic Non-Title V Source? (Emissions less than 100 ton/yr)	
3. [X] Synthetic Minor Source of Pollutants Other than Haps?	
4. [X] Synthetic Minor Source of HAPs? (Total HAP's less than 25 ton/yr)	
5. [X] One or More Emissions Units Subject to NSPS?	
6. [] One or More Emission Units Subject to NESHAP Recordkeeping or Reporting?	
7. Facility Regulatory Classifications Comment (limit to 200 characters): This facility does not meet the criteria of Title V "conditional exemption" in 62-210.300 (3) but is considered a "synthetic minor source" and is exempt from Title V permitting in accordance with EPA's definition. Emissions from facility less than 100 ton/year, regulated total HAPs emissions (in fuel oil) less than 25 ton/year.	

Rule Applicability Analysis

This facility is subject to NSPS and 40 CFR 60, subpart 000. This facility does not meet the criteria of Title V "conditional exemption" in 62-210.300 (3) but is considered a "synthetic minor source" and is exempt from Title V permitting in accordance with EPA's definition.

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
PM	B	0.04 gr/dscf		RULE	
PM10	B			RULE	
SO2	B			RULE	
NOx	B			RULE	
CO	B			RULE	
TOC	B			RULE	

EMISSIONS ID. NO. 001

250 TPH BCE - PORTABLE DRUM MIX ASPHALT PLANT

Emissions Unit Information Section 1 of 5

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):

A Bituma Engineering & Equipment Company (BCE) – Primary Collector Separator followed by a BCE, Model 400 baghouse system rated at 66,000 ACFM and 99.9 % by the manufacturer.

2. Control Device or Method Code(s): **101**

Emissions Unit Details

1. Package Unit: **Drum Mix Asphalt Plant controlled with primary collector and baghouse**
Manufacturer: **Bituma Engineering & Equipment Company (BCE)**
Model Number: **Primary Collector / Baghouse Model 400**

2. Generator Nameplate Rating: **MW**

3. Incinerator Information:

Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: **110.0 mmBtu/hr (plant's burner system)**

2. Maximum Incineration Rate: **lb/hr tons/day**

3. Maximum Process or Throughput Rate: **Maximum of 250 tph of hot mix asphalt concrete and a maximum of 750 gallons per hour of "on-spec" No.5 reclaimed fuel oil burned by the plant's burner system.**

4. Maximum Production Rate: **250 tph of hot mix asphaltic concrete.**

5. Requested Maximum Operating Schedule:

24 hours/day 7 days/week
52 weeks/year not to exceed: 4000 hrs/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Annual Production at this facility will consist of the following:

Total Tons of asphalt to be produced = 1 million ton
Total Fuel Consumption per year, by plant's burner system = maximum of 3.0 million gallons
Total Production Hours = 4000 maximum of operation by plant's burner system.

Facility is a "synthetic minor" source. Emissions are less than 100 tpy, while HAP's emissions are less than 25 tpy.

Emissions Unit Information Section 1 of 5

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? 001 Exhaust Stack		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NOT APPLICABLE			
3. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NOT APPLICABLE			
4. Discharge Type Code: V	6. Stack Height: ~ 30 feet	7. Exit Diameter: ~ 10 sq. feet	
8. Exit Temperature: ~275°F	9. Actual Volumetric Flow Rate: ~ 66,000 acfm	10. Water Vapor: ~30 %	
11. Maximum Dry Standard Flow Rate: ~ 35,000 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: (present location Glades) Zone: 17 East (km): 488.9 E North (km): 2967.9 N			
14. Emission Point Comment (limit to 200 characters): 			

Emissions Unit Information Section 1 of 5

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1 (Emissions for No.2 & 5 the Same)

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Bituma Engineering & Equipment Company, Inc. (BCE) – Portable Drum Mix Asphalt Plant, Burner System rated at 110.0 MMBtu/hr fired on “on-spec” No. 5 reclaimed fuel oil or No.2 virgin diesel fuel as a backup, with maximum sulfur limits of 0.5 % by weight and maximum consumption of 750 gallons per hour.		
2. Source Classification Code (SCC): 30500201		3. SCC Units: 1,000 gallons burned
4. Maximum Hourly Rate: 750 gal/hr max.	5. Maximum Annual Rate: 3.0 million gal/yr max.	6. Estimated Annual Activity Factor: NA
6. Maximum % Sulfur: 0.50 % by weight	7. Maximum % Ash: < 0.01 % by weight	8. Million Btu per SCC Unit: 0.138 MMBtu
10. Segment Comment (limit to 200 characters): The emissions factors contained in AP-42, table 11.1-8 for Drum Mix Asphalt Plants (1/95) indicated same emission factors for both types of fuel oil that will be used at this facility by the plant’s burner system.		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: 101	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 99.9%	
6. Potential Emissions: 10.00 lb/hour 20.00 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.040 lb/ton Reference: AP-42 (Table 11.1-5)		9. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $PM = (0.040 \text{ lb/ton}) (250 \text{ ton/hr}) = 10.00 \text{ lb/hr}$ $PM_{\text{yearly}} = (10.00 \text{ lb/hr})(4000 \text{ hr/yr}) / 2000 \text{ lb/ton} = 20.00 \text{ ton/yr}$			
10. Pollutant Potential Emissions Comment (limit to 200 characters): The emission factors contained in AP-42, table 11.1-8 Drum Mix Asphalt Plants (1/95) indicate the same emission factors for both types of fuel oils that will be used at this facility by the plant's burner system.			

Allowable Emissions Allowable Emissions 1 of 5

1. Basis for Allowable Emissions Code: RULE – Emissions subject to NSPS	2. Future Effective Date of Allowable Emissions: NA
2. Requested Allowable Emissions and Units: 0.04 grains/dscf	4. Equivalent Allowable Emissions: 10.00 lb/hour 20.00 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through initial and annual emissions compliance testing.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

Emissions Unit Information Section 1 of 5

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: SO2		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code:	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 14.00 lb/hour 28.00 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.056 lb/ton Reference: AP-42 (Table 11.1-8)		11. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): SO2 = (0.056 lb/ton) (250 ton/hr) = 14.00 lb/hr SO2_{yearly} = (14.00 lb/hr)(4000 hr/yr) / 2000 lb/ton = 28.00 ton/yr			
12. Pollutant Potential Emissions Comment (limit to 200 characters): The emission factors contained in AP-42, table 11.1-8 Drum Mix Asphalt Plants (1/95) indicate the same emission factors for both types of fuel oils that will be used at this facility by the plant's burner system.			

Allowable Emissions Allowable Emissions 2 of 5

3. Basis for Allowable Emissions Code: RULE – Emissions subject to VE standards	2. Future Effective Date of Allowable Emissions: NA
4. Requested Allowable Emissions and Units: 0.50 % sulfur by weight	4. Equivalent Allowable Emissions: 14.00 lb/hour 28.00 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

Emissions Unit Information Section 1 of 5

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: NOx		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code:	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 18.75 lb/hour 37.50 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.075 lb/ton Reference: AP-42 (Table 11.1-5)		13. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $\text{NOx} = (0.075 \text{ lb/ton}) (250 \text{ ton/hr}) = 18.75 \text{ lb/hr}$ $\text{NOx}_{\text{yearly}} = (18.75 \text{ lb/hr})(4000 \text{ hr/yr}) / 2000 \text{ lb/ton} = 37.50 \text{ ton/yr}$			
14. Pollutant Potential Emissions Comment (limit to 200 characters): The emission factors contained in AP-42, table 11.1-8 Drum Mix Asphalt Plants (1/95) indicate the same emission factors for both types of fuel oils that will be used at this facility by the plant's burner system.			

Allowable Emissions Allowable Emissions 3 of 5

5. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
6. Requested Allowable Emissions and Units: Emissions subject to VE standards	4. Equivalent Allowable Emissions: 18.75 lb/hour 37.50 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: CO		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code:	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 9.00 lb/hour 18.00 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.036 lb/ton Reference: AP-42 (Table 11.1-8)		15. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $CO = (0.036 \text{ lb/ton}) (250 \text{ ton/hr}) = 9.00 \text{ lb/hr}$ $CO_{\text{yearly}} = (9.00 \text{ lb/hr})(4000 \text{ hr/yr}) / 2000 \text{ lb/ton} = 18.00 \text{ ton/yr}$			
16. Pollutant Potential Emissions Comment (limit to 200 characters): The emission factors contained in AP-42, table 11.1-8 Drum Mix Asphalt Plants (1/95) indicate the same emission factors for both types of fuel oils that will be used at this facility by the plant's burner system.			

Allowable Emissions Allowable Emissions 4 of 5

7. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
8. Requested Allowable Emissions and Units: Emissions subject to VE standards	4. Equivalent Allowable Emissions: 9.00 lb/hour 18.00 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: TOC		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code:	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 0%	
6. Potential Emissions: 17.25 lb/hour 34.50 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.069 lb/ton Reference: AP-42 (Table 11.1-5)		17. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $\text{TOC} = (0.069 \text{ lb/ton}) (250 \text{ ton/hr}) = 17.25 \text{ lb/hr}$ $\text{TOC}_{\text{yearly}} = (17.25 \text{ lb/hr})(4000 \text{ hr/yr}) / 2000 \text{ lb/ton} = 34.50 \text{ ton/yr}$			
18. Pollutant Potential Emissions Comment (limit to 200 characters): The emission factors contained in AP-42, table 11.1-8 Drum Mix Asphalt Plants (1/95) indicate the same emission factors for both types of fuel oils that will be used at this facility by the plant's burner system.			

Allowable Emissions Allowable Emissions 5 of 5

9. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
10. Requested Allowable Emissions and Units: Emissions subject to VE standards	4. Equivalent Allowable Emissions: 17.25 lb/hour 34.50 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

Emissions Unit Information Section 1 of 5

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>IV</u> [] Not Applicable [] Waiver Requested Can be found in supplemental information section of application
3. Detailed Description of Control Equipment [] Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
5. Compliance Test Report <input checked="" type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: _____ [] Not Applicable
6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [] Not Applicable <input checked="" type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application [] Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [] Not Applicable
10. Supplemental Requirements Comment:

EMISSIONS ID. NO. 002
EMISSIONS GENTEC / HY-WAY
OIL HEATING SYSTEM

III. EMISSIONS UNIT INFORMATION - Gentec Hy-Way Heater

A separate Emissions Unit Information Section (including subsections A through G 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.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>		
<p>6. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Gentec Hy-Way Model No. HGYO-200 Oil Heating System, fired on No.2 Virgin Diesel Fuel with a maximum sulfur content of 0.5% by weight, rated at 2.0 MBtu/hr. Utilized to heat liquid asphalt tanks and fuel oil supplied to the plant's burner system.</p>		
<p>3. Emissions Unit Identification Number: ID: 002</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>
<p>7. Emissions Unit Status Code: ACTIVE</p>	<p>8. Initial Startup Date: ACTIVE - ASAP</p>	<p>9. Emissions Unit Major Group SIC Code: 2951</p>
<p>10. Emissions Unit Comment: (Limit to 500 Characters): This is an existing emissions unit and will remain as is with no changes.</p>		

Emissions Unit Information Section 2 of 5

Emissions Unit Control Equipment

5. Control Equipment/Method Description (limit to 200 characters per device or method):

NONE – limiting sulfur limits in fuel oil burned by this unit

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: **Hot Oil Heating System**

Manufacturer: **Genctec/ Hy-Way** Model Number: **HGYO-200**

2. Generator Nameplate Rating: MW

3. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: **2.00** mmBtu/hr (oil heater's burner system)

2. Maximum Incineration Rate: lb/hr tons/day

3. Maximum Process or Throughput Rate: **Maximum of 10.0 gal/hr.**

4. Maximum Production Rate: **10.0 gal/hr.**

7. Requested Maximum Operating Schedule:

24 hours/day 7 days/week

52 weeks/year not to exceed: 8760 hrs/year

8. Operating Capacity/Schedule Comment (limit to 200 characters):

This unit will operate continuously but will cycle at high and low fires. The maximum fuel consumption for this unit is 10.0 gallons hour.

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? 002 Oil Heater		6. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NOT APPLICABLE			
7. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NOT APPLICABLE			
8. Discharge Type Code: V	6. Stack Height: ~ 10 feet	7. Exit Diameter: ~ 0.75 feet	
8. Exit Temperature: ~200°F	9. Actual Volumetric Flow Rate: Unknown	10. Water Vapor: ~5 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: (@ present location, other locations not as yet determined) Zone: 17 East (km): 488.9 E North (km): 2967.9 N			
14. Emission Point Comment (limit to 200 characters):			

Emissions Unit Information Section 2 of 5

C. SEGMENT (PROCESS/FUEL) INFORMATION – Gencor Hy-Way Oil Heater

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Gentec Hy-Way Model HYGO-200 Oil Heating System fired on No.2 Virgin diesel fuel with a maximum sulfur content of 0.5% by weight, used to heat fuel oil going to plants burner system and to heat liquid asphalt before entering mixing drum of the plant.		
19. Source Classification Code (SCC): 30500201		20. SCC Units: 1,000 gallons burned
21. Maximum Hourly Rate: 10.00 gal/hr max.	22. Maximum Annual Rate: 87,600 gal/yr max.	6. Estimated Annual Activity Factor: NA
23. Maximum % Sulfur: 0.50 % by weight	24. Maximum % Ash: < 0.01 % by weight	25. Million Btu per SCC Unit: 0.138 MMBtu
10. Segment Comment (limit to 200 characters): Unit will be solely fired on No.2 virgin diesel fuel, this unit cycles from high to low fire dependent on heat needed.		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: NA	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 0.0%	
6. Potential Emissions: 0.02 lb/hour 0.08 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 2.0 lb/1,000 gal Reference: AP-42 (Table 1.3-7)		26. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $PM = (2.0 \text{ lb/1,000 gal}) (10.0 \text{ gal/hr}) = 0.02 \text{ lb/hr}$ $PM_{\text{yearly}} = (0.02 \text{ lb/hr})(8,760 \text{ hr/yr}) / 2000 \text{ lb/ton} = 0.08 \text{ ton/yr}$			
27. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 5

11. Basis for Allowable Emissions Code: RULE – Emissions subject to Opacity Stds.	2. Future Effective Date of Allowable Emissions: NA
12. Requested Allowable Emissions and Units: 20 % Opacity	4. Equivalent Allowable Emissions: 0.02 lb/hour 0.08 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through proper maintenance of oil heating system, initial and annual visible emissions testing and fuel analyses supplied by oil supplier.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: SO2		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: NA	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 0 %	
6. Potential Emissions: 1.42 lb/hour 6.22 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 142.0 lb/1,000 gal. Reference: AP-42 (Table 1.3-2)		28. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $ESO_2 = (142.0 \text{ lb/1,000 gal}) (10.0 \text{ gal/hr}) = 1.42 \text{ lb/hr}$ $ESO_{2, \text{yearly}} = (1.42 \text{ lb/hr})(8,760 \text{ hr/yr}) / 2000 \text{ lb/ton} = 6.22 \text{ ton/yr}$			
29. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 2 of 5

13. Basis for Allowable Emissions Code: RULE – Emissions subject to Opacity Stds.	2. Future Effective Date of Allowable Emissions: NA
14. Requested Allowable Emissions and Units: 0.50 % sulfur by weight	4. Equivalent Allowable Emissions: 1.42 lb/hour 6.22 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record, proper maintenance of burner system.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: NOx		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code:	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 0.20 lb/hour 0.88 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 20.0 lb/1,000 gal Reference: AP-42 (Table 1.3-2)		30. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $\text{NOx} = (20.0 \text{ lb/1,000 gal}) (10.0 \text{ gal/hr}) = 0.20 \text{ lb/hr}$ $\text{NOx}_{\text{yearly}} = (0.20 \text{ lb/hr})(8,760 \text{ hr/yr}) / 2000 \text{ lb/ton} = 0.88 \text{ ton/yr}$			
31. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 3 of 5

15. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
16. Requested Allowable Emissions and Units: Emissions subject to Opacity stds.	4. Equivalent Allowable Emissions: 0.20 lb/hour 0.88 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record and proper maintenance of this unit.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: CO		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: NA	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 0%	
6. Potential Emissions: 0.05 lb/hour 0.22 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 5.0 lb/1,000 gal Reference: AP-42 (Table 1.3-2)		32. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $CO = (5.0 \text{ lb/1,000 gal})(10.0 \text{ gal/hr}) = 0.05 \text{ lb/hr}$ $CO_{\text{yearly}} = (0.05 \text{ lb/hr})(8,760 \text{ hr/yr}) / 2000 \text{ lb/ton} = 0.22 \text{ ton/yr}$			
33. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 4 of 5

17. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
18. Requested Allowable Emissions and Units: Emissions subject to opacity stds.	4. Equivalent Allowable Emissions: 0.05 lb/hour 0.22 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record and proper maintenance of this unit.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: TOC		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: NA	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 0%	
6. Potential Emissions: 0.003 lb/hour 0.013 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.252 lb/1,000 gal Reference: AP-42 (Table 1.3-4)		34. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $\text{TOC} = (0.252 \text{ lb/1,000 gal}) (10.0 \text{ gal/hr}) = 0.003 \text{ lb/hr}$ $\text{TOC}_{\text{yearly}} = (0.003 \text{ lb/hr})(8,760 \text{ hr/yr}) / 2000 \text{ lb/ton} = 0.013 \text{ ton/yr}$			
35. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 5 of 5

19. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
20. Requested Allowable Emissions and Units: Emissions subject to opacity standards	4. Equivalent Allowable Emissions: 0.003 lb/hour 0.013 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through fuel oil analyses supplies with every load delivered to this plant and kept on record and proper maintenance of this unit.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

EMMISSIONS ID. NO. 003

**EMMISSIONS FROM BCE -
RECLAIMED ASPHALT VIBRATING SCREENER**

III. EMISSIONS UNIT INFORMATION

BCE – Vibrating Reclaimed Asphalt Screener

A separate Emissions Unit Information Section (including subsections A through G 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.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)		
<input type="checkbox"/> 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).		
<input type="checkbox"/> 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.		
<input checked="" type="checkbox"/> 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.		
2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):		
BCE - Vibrating Reclaimed Asphalt Screening unit – used to screen reclaimed crushed asphalt to a desired size before entering rotary mixing drum of asphalt plant		
3. Emissions Unit Identification Number:		
ID: 003		<input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown
11. Emissions Unit Status Code:	12. Initial Startup Date:	13. Emissions Unit Major Group SIC Code:
ACTIVE	ACTIVE (ASAP)	2951
14. Emissions Unit Comment: (Limit to 500 Characters):		
This is an existing emissions unit and will remain as is with no changes.		

Emissions Unit Information Section 3 of 5

Emissions Unit Control Equipment

9. Control Equipment/Method Description (limit to 200 characters per device or method):

All material crushed or ground by this crusher is already coated with liquid asphalt, therefore fugitive emissions from this point will be minimum to nil.

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: **Vibrating Material Screener**
Manufacturer: **Bituma Engineering & Equipment Co.** Model Number: **RAP-100**

2. Generator Nameplate Rating: MW

3. Incinerator Information:
Dwell Temperature: °F
Dwell Time: seconds
Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:
2. Maximum Incineration Rate: lb/hr tons/day

3. Maximum Process or Throughput Rate: **Maximum of 90.0 tph**

4. Maximum Production Rate: **90.0 ton/hr.**

9. Requested Maximum Operating Schedule:

24 hours/day 7 days/week
52 weeks/year not to exceed: 4000 hrs/year

10. Operating Capacity/Schedule Comment (limit to 200 characters):
This unit will operate continuously as recycle asphalt is produced. Unit will screen and feed no more than 90.0 tph to plant's mixing drum.

Emissions Unit Information Section 3 of 5

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? 003 RAP Screener		10. Emission Point Type Code: 4	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA – Fugitive Emission Point			
11. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NOT APPLICABLE			
12. Discharge Type Code: F	6. Stack Height: ~ 12 feet	7. Exit Diameter: Not Determinable feet	
8. Exit Temperature: ~Ambient °F	9. Actual Volumetric Flow Rate: Unknown	10. Water Vapor: ~5 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: (@ present location, other locations not as yet determined) Zone: 17 East (km): 488.9 E North (km): 2967.9 N			
14. Emission Point Comment (limit to 200 characters): This emission point subject to 40 CFR 60, subpart 000			

Emissions Unit Information Section 3 of 5

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Fugitive emissions from vibrating screening unit. (Material Handling) emissions related to screening of reclaimed material.		
36. Source Classification Code (SCC): 30502510		37. SCC Units: Tons of product
38. Maximum Hourly Rate: 90.0 ton/hr	39. Maximum Annual Rate: 360,000 ton/yr max.	6. Estimated Annual Activity Factor: NA
40. Maximum % Sulfur: NA	41. Maximum % Ash: NA	42. Million Btu per SCC Unit: NA
10. Segment Comment (limit to 200 characters): FUGITIVE EMISSIONS CALCULATED AT WORST CASE SCENARIO		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM10, TSP		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: None	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 0.0%	
6. Potential Emissions: PM10 : 0.21 lb/hr, 0.43 ton/yr TSP: 0.44 lb/hour 0.90 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.0024 lb/ton Reference: AP-42 (Table 11.19.2-2)		43. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters): $PM10 = (90.0 \text{ ton/hr}) (0.0024 \text{ lb/ton}) = 0.21 \text{ lb/hr}$ $PM10_{\text{yearly}} = [(90.0 \text{ ton/hr})(4000 \text{ hr/yr})(0.0024 \text{ lb/ton})] / 2000 \text{ lb/ton} = 0.43 \text{ ton/yr}$ $TSP_{\text{hour}} = (0.21 \text{ lb/hr}) (2.1) = 0.44 \text{ lb/hr}$ $TSP_{\text{yearly}} = (0.43 \text{ ton/hr})(2.1) = 0.90 \text{ ton/yr}$			
44. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 7

3. Basis for Allowable Emissions Code: RULE – Emissions subject to subpart 000	2. Future Effective Date of Allowable Emissions: NA
4. Requested Allowable Emissions and Units: <10% Opacity	5. Equivalent Allowable Emissions: PM10 = 0.21 lb/hr, 0.43 ton/hr TSP = 0.44 lb/hour, 0.90 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through initial and annual emissions compliance testing.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>IV</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested Can be found in initial compliance test.
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input checked="" type="checkbox"/> Attached, Document ID: <u>IV</u> <input checked="" type="checkbox"/> Previously submitted, Date: _____ <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
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 type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

EMISSIONS ID. NO. 004

**FUGITIVE EMISSIONS FROM PAVED
& UNPAVED ROADS**

III. EMISSIONS UNIT INFORMATION

FUGITIVE EMISSIONS FROM PAVED & UNPAVED AREAS

A separate Emissions Unit Information Section (including subsections A through G 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.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input checked="" type="checkbox"/> 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.</p>		
<p>6. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p>Fugitive emissions from paved and unpaved areas – worst case scenario. All paved and unpaved areas and aggregate piles at this facility as well as other locations will be kept damp on an as needed basis.</p>		
<p>3. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: 004 <input type="checkbox"/> ID Unknown</p>		
<p>15. Emissions Unit Status Code:</p> <p style="text-align: center;">NA</p>	<p>16. Initial Startup Date:</p> <p style="text-align: center;">ASAP</p>	<p>17. Emissions Unit Major Group SIC Code:</p> <p style="text-align: center;">2951</p>
<p>18. Emissions Unit Comment: (Limit to 500 Characters):</p> <p><i>Fugitive emissions from paved and unpaved areas – worst case scenario. All paved and unpaved areas and aggregate piles at this facility and other locations will be kept damp on an as needed basis.</i></p>		

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? 004 – Unpaved/Paved Areas		14. Emission Point Type Code: 4	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA – Fugitive Emission Point			
15. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NOT APPLICABLE			
16. Discharge Type Code: F	6. Stack Height: ~ 0.0 feet	7. Exit Diameter: Not Determinable feet	
8. Exit Temperature: ~Ambient °F	9. Actual Volumetric Flow Rate: Unknown	10. Water Vapor: ~5 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: (@ present location, other locations UTM not determined as of yet.) Zone: 17 East (km): 488.9 E North (km): 2967.9 N			
14. Emission Point Comment (limit to 200 characters): This emission point subject to 62-296.310 FAC Rules and Regulations.			

Emissions Unit Information Section 4 of 5

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Fugitive emissions from paved, unpaved roads and stockpiles (Material Handling) emissions related to silt content on roadways and vehicular traffic in facility. Worst case scenario.		
45. Source Classification Code (SCC): 3050204		46. SCC Units: Vehicle Miles Traveled
47. Maximum Hourly Rate: NA	48. Maximum Annual Rate: NA	6. Estimated Annual Activity Factor: NA
49. Maximum % Sulfur: NA	50. Maximum % Ash: NA	51. Million Btu per SCC Unit: NA
10. Segment Comment (limit to 200 characters): FUGITIVE EMISSIONS CALCULATED AT WORST CASE SCENARIO		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): 		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM10, TSP		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: 099	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 90.0%	
6. Potential Emissions: PM10 : 1.0 lb/hr, 1.67 ton/yr TSP: 2.1 lb/hour 3.28 tons/year		7. Synthetically Limited? [X] YES	
8. Emission Factor: 0.24 lb/VMT Reference: AP-42 (Section 13.2.1.1) unpaved roads		52. Emissions Method Code: 3	
53. Calculation of Emissions (limit to 600 characters): $E = k(5.9)[s/12][S/30][W/3]^{0.7}[w/4]^{0.5}[365-P/365]$ $E = 0.36(5.9)[8.9/12][5/30][31.3/3]^{0.7}[10/4]^{0.5}[365-120/365] = 2.0 \text{ lb/VMT}$ $E = 2.0 \text{ lb/VMT (1-0.90 control efficiency from water truck)} = 0.2 \text{ lb/VMT}$ $E_{\text{daily}} = (0.2 \text{ lb/VMT})(50 \text{ VMT/day}) = 10.0 \text{ lb/day}$ $E_{\text{year}} = [(10.0 \text{ lb/day}) / (\sim 12 \text{ hr/day}) (4000 \text{ hr/yr}) / 2000 \text{ lb/ton}] = 1.67 \text{ ton/yr}$			
54. Pollutant Potential Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 7

7. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
8. Requested Allowable Emissions and Units: <10% Opacity	9. Equivalent Allowable Emissions: PM10 = 1.0 lb/hr, 1.67 ton/hr TSP = 2.10 lb/hour, 3.28 tons/year
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through initial and annual emissions compliance testing. Watering of roadways and stockpiles will be performed as to control fugitive emissions at all locations.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>III</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>IV</u> [] Not Applicable [] Waiver Requested Can be found in initial compliance test.
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
5. Compliance Test Report <input checked="" type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: _____ <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
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: _____ [] Not Applicable
10. Supplemental Requirements Comment:

EMISSIONS ID. NO. 005

**FUGITIVES FROM STOCKPILES &
CONVEYOR DROP POINTS**

III. EMISSIONS UNIT INFORMATION

FUGITIVE EMISSIONS FROM AGGREGATE HANDLING

A separate Emissions Unit Information Section (including subsections A through G 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.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

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

11. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Fugitive emissions from paved and unpaved areas – worst case scenario. All paved and unpaved areas and aggregate piles at this facility and other locations will be kept damp on an as needed basis.

3. Emissions Unit Identification Number: No ID
 ID: 005 ID Unknown

19. Emissions Unit Status Code: NA	20. Initial Startup Date: ASAP	21. Emissions Unit Major Group SIC Code: 2951
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22. Emissions Unit Comment: (Limit to 500 Characters):

Fugitive emissions from Aggregate Handling – worst case scenario. All aggregate piles at this facility and other locations will be kept damp on an as needed basis.

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? 005 – Conveyor Drops, Loader Operations		18. Emission Point Type Code: 4	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA – Fugitive Emission Point			
19. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NOT APPLICABLE			
20. Discharge Type Code: F	6. Stack Height: ~ 0.0 feet	7. Exit Diameter: Not Determinable feet	
8. Exit Temperature: ~Ambient °F	9. Actual Volumetric Flow Rate: Unknown	10. Water Vapor: ~5 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: (@ present location. UTM's for other locations have not been determined as of yet) Zone: 17 East (km): 488.9 E North (km): 2967.9 N			
14. Emission Point Comment (limit to 200 characters): This emission point subject to 62-296.310 FAC Rules and Regulations.			

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Fugitive emissions from aggregate stockpiles and conveyor belts (Material Handling) emissions related to fugitives from conveyor belt drops and from aggregate storage piles from prevailing winds.		
55. Source Classification Code (SCC): 3050207, 3050205		56. SCC Units: Area of stockpiles / tons of products
57. Maximum Hourly Rate: NA	58. Maximum Annual Rate: NA	6. Estimated Annual Activity Factor: NA
59. Maximum % Sulfur: NA	60. Maximum % Ash: NA	61. Million Btu per SCC Unit: NA
10. Segment Comment (limit to 200 characters): FUGITIVE EMISSIONS CALCULATED AT WORST CASE SCENARIO		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): 		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM10, TSP		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: 099	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control: 90.0%	
6. Potential Emissions: PM10 : 0.20 lb/hr, 0.41 ton/yr TSP = 0.42 lb/hr, 0.86 ton/yr		7. Synthetically Limited? [X] YES	
6. Emission Factor: Reference: AP-42 (Section 13.2.4.2)		9. Emissions Method Code: 3	
7. Calculation of Emissions (limit to 600 characters): $E = k(0.0032)[w/5]^{1.3}[M/2]^{1.4}$ $E = 0.35(0.0032)[7/5]^{1.3} / [0.7/2]^{1.4} = 0.0081 \text{ lb/ton}$ $E = 250 \text{ ton/hr (0.0081 lb/ton)} = 2.03 \text{ lb/hr}$ $E = (2.03 \text{ lb/hr})(1-0.90 \text{ collector efficiency}) (\sim 24 \text{ hr/day}) = 4.87 \text{ lb/day}$ $E = [(4.87 \text{ lb/day}) / (\sim 24 \text{ hr/day}) (4000 \text{ hr/yr}) / 2000 \text{ lb/ton}] = 0.41 \text{ ton/yr}$			
8. Pollutant Potential Emissions Comment (limit to 200 characters): Aggregate Storage Piles & Conveyor Drops – Fugitive Emissions (controlled) are subject to 62-296.700 (2)(e)(f)			

Allowable Emissions Allowable Emissions 1 of 7

12. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
13. Requested Allowable Emissions and Units: <10% Opacity	14. Equivalent Allowable Emissions: PM10: 0.20 lb/hr, 0.41 ton/hr TSP = 0.42 lb/hr, 0.86 ton/yr
5. Method of Compliance (limit to 60 characters): Compliance will be achieved through initial and annual emissions compliance testing. Watering of stockpiles will be performed as to control fugitive emissions at all sites.	
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u> III </u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u> IV </u> [] Not Applicable [] Waiver Requested Can be found in initial compliance test.
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ [] Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ [] Not Applicable [] Waiver Requested
5. Compliance Test Report <input checked="" type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: _____ <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
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: _____ [] Not Applicable
10. Supplemental Requirements Comment:

TABLE OF CONTENTS

- I. FACILITY LOCATION**
- II. SITE PLAN**
- III. FLOW DIAGRAM**
- IV. INITIAL COMPLIANCE TEST**
- V. SUPPLEMENTAL INFORMATION**

I. FACILITY LOCATION

78

78

78

27

Ajax Paving Industries, Inc.
Portable Plant #4
Moore Haven, Florida

Washington Park

816'

HERBERT HOOVER DYKE

CANAL

FIRST

RENN

BIG BRANC
YACHT CLUB

ELDERBERRY

CAK MONT

ORCHARD

AVENUE D

AVENUE E

AVENUE B

RAILROAD

AVENUE H

AVENUE I

AVENUE J

AVENUE K

AVENUE L

26 50'

WAGON TRL

SADDLE N

PONY

AVENUE J

AVENUE K

AVENUE L

AVENUE M

AVENUE N

AVENUE O

AVENUE R

AVENUE S

AVENUE T

AVENUE U

AVENUE V

AVENUE W

AVENUE X

AVENUE Y

AVENUE Z

AVENUE AA

AVENUE AB

AVENUE AC

AVENUE AD

AVENUE AE

AVENUE AF

AVENUE AG

WESTERN

RODEO RD

CYPRESS

RAMEY

10TH

AVENUE O

AVENUE R

AVENUE S

AVENUE T

AVENUE U

AVENUE V

AVENUE W

AVENUE X

AVENUE Y

AVENUE Z

AVENUE AA

AVENUE AB

AVENUE AC

AVENUE AD

AVENUE AE

AVENUE AF

AVENUE AG

FOX LN

FOXMOOR

CITY LIMIT RD

WEST

NORTH

COVE

GULF

LAKE

RIVERSIDE

HICPOCHEE

AZALEA

RIVER RD

2ND ST

3RD

4TH

5TH

6TH

7TH

8TH

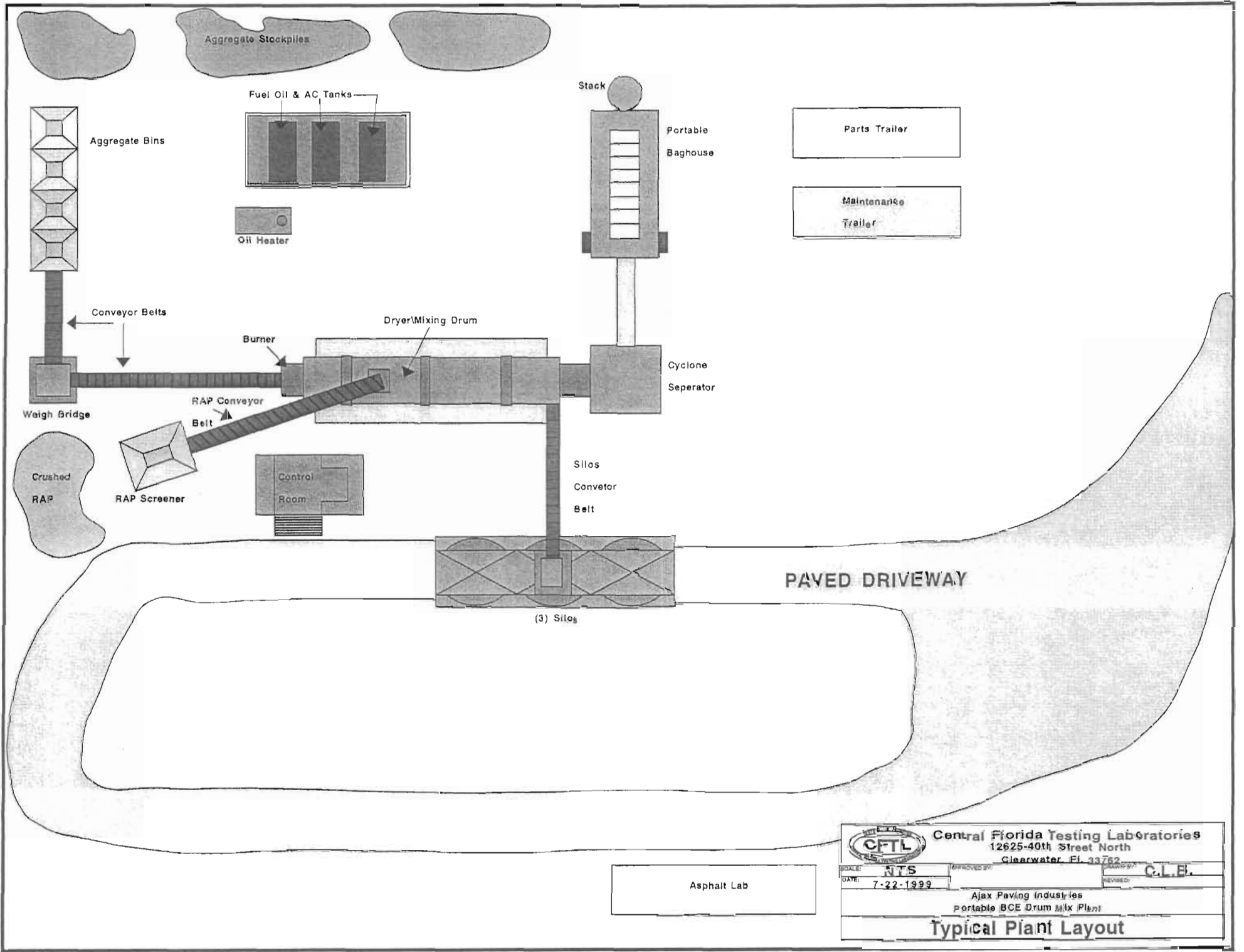
9TH


10TH

11TH

12TH

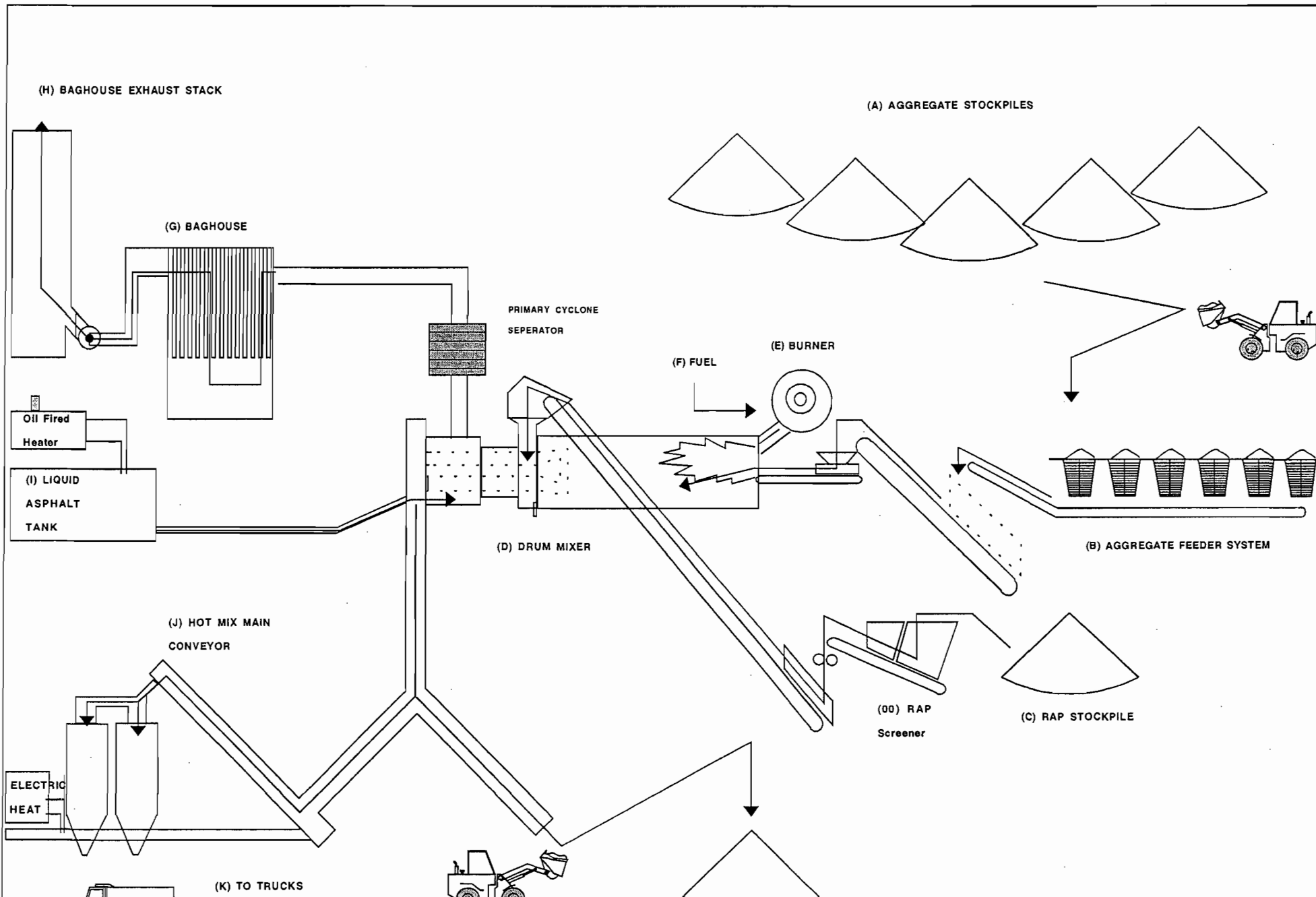
II. SITE PLAN




 Central Florida Testing Laboratories 12625-40th Street North Clearwater, FL 33762			
SCALE:	NTS	APPROVED BY:	DRAWING NO:
DATE:	7-22-1999	REVIEWED:	C.L.E.
Ajax Paving Industries Portable BCE Drum Mix Plant			
Typical Plant Layout			

Asphalt Lab

III. FLOW DIAGRAM



 Central Florida Testing Laboratories 12625 - 40th Street North CLEARWATER, FL. 33762		
SCALE: NTS	APPROVED BY:	DRAWN BY: C.L.B.
DATE: 7-22-1999		REVISIONS:
AJAX PAVING INDUSTRIES Portable BCE Drum Mix Plant		
Plant Flow Diagram		



IV. INITIAL COMPLIANCE TEST

I. PURPOSE OF TEST

This source consists of a portable 250 ton per hour Bituma Construction & Engineering Company (BCE), Inc. – Drum Mix Asphalt Batch Plant owned and operated by Ajax Paving Industries, Inc. of Nokomis, Florida. This asphaltic concrete producing facility is now located at 1740 - U.S. 27 South in Moorehaven, Glades County, Florida, where it has started its initial operation as a portable plant.

This asphaltic concrete manufacturing facility utilizes a BCE, Inc. – Primary Collector that removes 50% of the dust emissions created in the drying/mixing drum followed by a BCE, Inc., Model 400 baghouse control system rated at 99.9% efficient by the manufacturer, to control the emissions of dust particles which are generated in the rotary dryer and screening tower of this plant.

The testing was conducted to show compliance with the "Statewide" Florida Department of Environmental Protection (FDEP) construction permit No. 7770060-003-AC issued for the construction and relocation of this asphaltic concrete manufacturing facility. The specific conditions of this construction permit requires that initial testing be performed to determine the amount of particulate, visible and sulfur dioxide emissions in the exhaust gas stream of the plant. This source is limited to emission existing the asphaltic concrete producing facilities of 0.04 grains per dry standard cubic foot of exhausted air or gas, in accordance with F.A.C. Rules 62-296.704 and 62-4.070(3), while the visible emissions from the exhaust gas stream of the stack are limited to an opacity of twenty (20) percent.

II. TEST METHODS

The testing was performed in accordance with the methods prescribed in Section 62-2.700, "Stationary Point Source Emissions Test Procedures" as published by the Florida Department of Environmental Protection in Chapter 62-2 of the Florida Administrative Code. The particulate and visible emissions tests were conducted in accordance with the procedures outlined in "Method 5 - Determination of Particulate Emissions from Stationary Sources" and "Method 9 - Determination of the Opacity of Emissions from Stationary Sources" as published by the U.S. Environmental Protection Agency in Appendix A of Title 40, Part 60 of the Code of Federal Regulations with the following exception. A heated stainless steel liner was utilized in lieu of a quartz liner in the Method 5 sampling train. In addition, a fifth empty modified Greenburg-Smith impinger was placed in the condensing unit of the sampling train due to high moisture contents encountered in the gas stream.

III. TEST PERSONNEL

This compliance test was conducted by Central Florida Testing Laboratories, Inc. of Largo, Florida. The source sampling team consisted of Bernard A. Ball, Jr., Environmental Engineer, test team supervisor and ETA state certified observer, Mr. Christopher Briley, Environmental Technician and ETA state certified observer and Mr. Christopher Coyle, Environmental Technician.

Process weight determinations and plant operating parameters were computer monitored and logged by Mr. Robert Ray asphalt plant operations supervisor for Ajax Paving Industries and Mr. Bernard A. Ball, Jr. of Central Florida Testing Laboratories, Inc.

During initial compliance testing at this facility the Florida Department of Environmental Protection (FDEP) was represented by Mr. Earl Baker, Engineer from their Air Quality Enforcement Division located in Ft. Myers, Florida.

IV. DISCUSSION OF RESULTS

During the initial particulate and visible emission compliance testing, the plant was producing a virgin Florida Department of Transportation (FDOT) specification Type S-3 virgin asphaltic concrete mix at rates of 193.1 to 194.6 tons per hour. To produce asphaltic concrete at these rates, the plant's burner system was consuming reclaimed "on-spec" No. 5 fuel oil at rates of 440.6 to 447.5 gallons per hour. In addition, to control the emission generated in the rotary dryer of the plant, the baghouse system was being operated at an average differential pressure drop of 4.6 to 4.8 inches of water.

As shown in the "Summary of Results" of this test, the average particulate emission concentration in the exhaust gas stream from the plant's baghouse control system was only 0.0132 grains per dry standard cubic foot. This is equivalent to a mass emissions rate of only 2.38 pounds per hour. The particulate emission concentration in the exhausted gas stream from this asphaltic concrete manufacturing facility is below the permitted allowable "Standards of Performance for Hot Mix Asphalt Facilities" emission limitation of 0.04 grains per dry standard cubic foot of exhaust gas or air.

Results of the required three - one hour visible emission compliance test performed simultaneously with each of the particulate test runs, also indicates that the emissions from this facility are being controlled on a consistent basis, as little to no visible or fugitive emissions were observed from this asphaltic concrete producing facility during the initial compliance testing period at this facility.

A fuel oil analysis from International Petroleum Corporation, Inc., the supplier of the No. 5 "on-spec" reclaimed fuel oil to fire the plants burner system during the compliance test, was delivered to the plant on 01-07-2000 showed that all parameters met the criteria levels for "on-spec" fuel oil. The analysis also showed the Sulfur (S) content in the fuel oil to be 0.43 percent by weight. The Sulfur in the fuel oil combines with Oxygen during the combustion process to form Sulfur Dioxide which was escaping the primary collector and baghouse control system of this plant at a maximum mathematically estimated rate of 28.29 pounds per hour during the compliance testing.

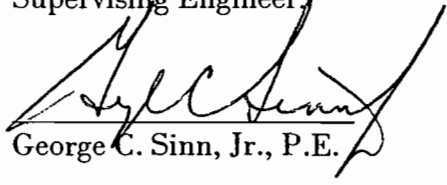
IV. DISCUSSION OF RESULTS (cont.)

As these tests demonstrate, the BCE, Inc. - Primary Collection System followed by the BCE, Inc. - Model 400 baghouse control system utilized by Ajax Paving Industries, Inc. on its Portable BCE, Inc. Drum Mix Plant located in Moorehaven, Florida are operating properly and very effectively controlling the emissions of dust particles, fugitives and gaseous emissions from this plant while producing virgin or recycled asphalt mix is operating in compliance with it's FDEP Construction Permit No. 7770060-003-AC and it's specific conditions.

Report compiled by:

Bernard A. Ball, Jr.

Supervising Engineer:



George C. Sinn, Jr., P.E.

CFTL

Aiax Paving. Industries

Plant No. 4

February 10, 2000

CFTL No.: 130463

PARTICULATE EMISSIONS SOURCE TEST RESULTS

RUN	1	2	3	AVG
DRY GAS VOLUME (dscf):	38.11	38.18	37.93	38.07
GAS STREAM VELOCITY (fps):	65.94	66.59	66.73	66.42
ACTUAL VOLUMETRIC FLOW RATE (ACFM):	44866	45308	45403	45192
STANDARD VOLUMETRIC FLOW RATE (SCFM):	20948	21111	20931	20997
PERCENT MOISTURE:	34.0	34.0	34.3	34.1
STACK TEMPERATURE (°F):	290.6	291.4	295.0	292.3
PERCENT ISOKINETIC:	100.8	100.3	100.5	100.5
GRAIN LOADING (grains/dscf):	0.0132	0.0130	0.0134	0.0132
ACTUAL EMISSION RATE (lb/hr):	2.37	2.36	2.40	2.38
ALLOWABLE EMISSIONS (gr/dscf):	0.04	0.04	0.04	0.04

CFTL

Aiax Paving. Industries

Plant No. 4

February 10, 2000

CFTL No.: 130463

PARTICULATE EMISSIONS SOURCE TEST RESULTS

RUN	1	2	3
VI - volume of moisture collected (ml):	416.1	417.3	420.0
Tm - average meter temperature (°F):	64.6	73.8	82.4
Vm - actual sample volume metered (cu. ft.):	36.052	36.793	37.187
Pb - barometric pressure (in. Hg):	30.09	30.06	30.02
Pm - average meter pressure (in. Hg):	30.09	30.06	30.02
As - stack area (sq. ft.):	11.34	11.34	11.34
An - probe tip area (sq. ft.):	0.000341	0.000341	0.000341
Ts - average stack temperature (°F):	290.6	291.4	295.0
θ - net sampling time (minutes):	60	60	60
ΔP - [avg(velocity head) ^{1/2}] ² (in. water):	0.895	0.911	0.908
ΔH - [average orifice pressure (in. Hg):	1.070	1.088	1.085
Ps - average stack pressure (in. Hg):	30.11	30.09	30.05
Cp - pitot tube coefficient:	0.82	0.82	0.82
Mn - amount of contaminant in sample (mg):	32.6	32.3	33



Ajax Paving, Industries

Plant No. 4

Annual Emissions Compliance Test

Calculation of Emissions

RUN # 1

Dry Meter Volume Corrected to STP

$$VM_{STD} = \delta \times V_M \times \left(\frac{T_{STD}}{T_M} \right) \times \left(\frac{P_{B+\frac{\Delta H}{13.6}}}{P_{STD}} \right) \Rightarrow$$
$$1.0415 \times 36.052 \times \left(\frac{528}{524.6} \right) \times \left(\frac{30.09 + \frac{1.070}{13.6}}{29.92} \right) = 38.11 \text{ C. F.}$$

Water Vapor Volume

$$VW_{STD} = 0.04714 \times V_L \Rightarrow 0.04714 \times (416.1) = 19.61 \text{ C. F.}$$

Moisture in Gas Stream

$$BWO = \frac{VW_{STD}}{VW_{STD} + VM_{STD}} \Rightarrow \frac{19.61}{19.61 + 38.11} = 34.0 \%$$

Molecular Weight of Gas

$$M_S = 28.952 \times (1 - BWO) + 18 \times BWO \Rightarrow$$
$$28.952 \times (1 - 0.340) + 18 \times (0.340) = 25.23 \text{ lb/lb mole}$$

Gas Stream Velocity

$$V_S = 85.48 \times C_P \times \left(\frac{T_S \times \Delta P}{P_S \times M_S} \right)^{1/2} \Rightarrow$$
$$85.48 \times (0.82) \times \left(\frac{750.6 \times 0.895}{30.09 \times 25.23} \right)^{1/2} = 65.94 \text{ fps}$$

Stack Volumetric Flow Rate

$$ACFM = A_S \times V_S \times 60 \Rightarrow (11.34) \times (65.94) \times (60) \Rightarrow$$
$$= 44866 \text{ CFM}$$



Ajax Paving, Industries

Plant No. 4

Annual Emissions Compliance Test

Calculation of Emissions

RUN # 1 (cont)

Stack Flow Corrected to STP

$$SCFM = ACFM \times (1 - BWO) \times \left(\frac{T_{STD}}{T_s} \right) \times \left(\frac{P_s}{P_{STD}} \right) \Rightarrow$$

$$44866 \times (1 - 0.340) \times \left(\frac{528}{750.6} \right) \times \left(\frac{30.09}{29.92} \right) = 20948 \text{ CFM}$$

Percent Isokinetic

$$I = \frac{1.667 \times \left(0.00267 \times V_L + \left(\frac{V_M \times \delta}{T_M} \right) \times \left(P_B + \frac{\Delta H}{13.6} \right) \right) \times T_s}{\theta \times V_s \times P_s \times A_N} \Rightarrow$$

$$\frac{1.667 \times \left(0.00267 \times 416.1 + \left(\frac{36.052 \times 1.0415}{524.6} \right) \times \left(30.09 + \frac{1.070}{13.6} \right) \right) \times 750.6}{60 \times 65.94 \times 30.09 \times 0.000341} \Rightarrow$$

$$= 100.8 \%$$

Grain Loading

$$C_s = 0.0154 \times \left(\frac{M_N}{SCF} \right) \Rightarrow$$

$$0.0154 \times \left(\frac{32.6}{38.11} \right) = 0.0132 \text{ GRAINS/SCF}$$

Emission Rate

$$E = C_s \times SCFM \times \left(\frac{60}{7000} \right) \Rightarrow 0.0132 \times 20948 \times \left(\frac{60}{7000} \right) = 2.37 \text{ lb/hr}$$

Allowable Emission Rate

$$E_a = 0.04$$



Ajax Paving, Industries

Plant No. 4

Annual Emissions Compliance Test

Calculation of Emissions

RUN # 2

Dry Meter Volume Corrected to STP

$$VM_{STD} = \delta \times V_M \times \left(\frac{T_{STD}}{T_M} \right) \times \left(\frac{P_B + \frac{\Delta H}{13.6}}{P_{STD}} \right) \Rightarrow$$
$$1.0415 \times 36.793 \times \left(\frac{528}{533.8} \right) \times \left(\frac{30.06 + \frac{1.088}{13.6}}{29.92} \right) = 38.18 \text{ C. F.}$$

Water Vapor Volume

$$V_{WSTD} = 0.04714 \times V_L \Rightarrow 0.04714 \times (417.3) = 19.67 \text{ C. F.}$$

Moisture in Gas Stream

$$B_{WO} = \frac{V_{WSTD}}{V_{WSTD} + V_{MSTD}} \Rightarrow \frac{19.67}{19.67 + 38.18} = 34.0 \%$$

Molecular Weight of Gas

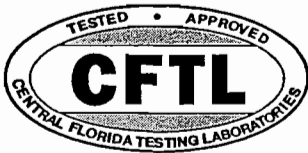
$$M_S = 28.952 \times (1 - B_{WO}) + 18 \times B_{WO} \Rightarrow$$
$$28.952 \times (1 - 0.340) + 18 \times (0.340) = 25.23 \text{ lb/lb mole}$$

Gas Stream Velocity

$$V_S = 85.48 \times C_P \times \left(\frac{T_S \times \Delta P}{P_S \times M_S} \right)^{1/2} \Rightarrow$$
$$85.48 \times (0.82) \times \left(\frac{751.4 \times 0.911}{30.06 \times 25.23} \right)^{1/2} = 66.59 \text{ fps}$$

Stack Volumetric Flow Rate

$$ACFM = A_S \times V_S \times 60 \Rightarrow (11.34) \times (66.59) \times (60) \Rightarrow$$
$$= 45308 \text{ CFM}$$



Ajax Paving, Industries

Plant No. 4

Annual Emissions Compliance Test

Calculation of Emissions

RUN # 2 (cont)

Stack Flow Corrected to STP

$$SCFM = ACFM \times (1 - BWO) \times \left(\frac{T_{STD}}{T_s} \right) \times \left(\frac{P_s}{P_{STD}} \right) \Rightarrow$$

$$45308 \times (1 - 0.340) \times \left(\frac{528}{751.4} \right) \times \left(\frac{30.06}{29.92} \right) = 21111 \text{ CFM}$$

% Isokinetic

$$I = \frac{1.667 \times \left(0.00267 \times V_L + \left(\frac{V_M \times \delta}{T_M} \right) \times \left(P_B + \frac{\Delta H}{13.6} \right) \right) \times T_s}{\theta \times V_s \times P_s \times A_N} \Rightarrow$$

$$\frac{1.667 \times \left(0.00267 \times 417.3 + \left(\frac{36.793 \times 1.0415}{533.8} \right) \times \left(30.06 + \frac{1.088}{13.6} \right) \right) \times 751.4}{60 \times 66.59 \times 30.06 \times 0.000341} \Rightarrow$$

= 100.3 %

Grain Loading

$$C_s = 0.0154 \times \left(\frac{M_N}{SCF} \right) \Rightarrow$$

$$0.0154 \times \left(\frac{32.3}{38.18} \right) = 0.0130 \text{ GRAINS/SCF}$$

Emission Rate

$$E = C_s \times SCFM \times \left(\frac{60}{7000} \right) \Rightarrow 0.0130 \times 21111 \times \left(\frac{60}{7000} \right) = 2.36 \text{ lb/hr}$$

Allowable Emission Rate

$$E_a = 0.04$$



Ajax Paving, Industries

Plant No. 4

Annual Emissions Compliance Test

Calculation of Emissions

RUN # 3

Dry Meter Volume Corrected to STP

$$VM_{STD} = \delta \times V_M \times \left(\frac{T_{STD}}{T_M} \right) \times \left(\frac{P_{B+\frac{\Delta H}{13.6}}}{P_{STD}} \right) \Rightarrow$$
$$1.0415 \times 37.187 \times \left(\frac{528}{542.4} \right) \times \left(\frac{30.02 + \frac{1.085}{13.6}}{29.92} \right) = 37.93 \text{ C. F.}$$

Water Vapor Volume

$$VW_{STD} = 0.04714 \times V_L \Rightarrow 0.04714 \times (420.0) = 19.80 \text{ C. F.}$$

Moisture in Gas Stream

$$B_{WO} = \frac{VW_{STD}}{VW_{STD} + VM_{STD}} \Rightarrow \frac{19.80}{19.80 + 37.93} = 34.3 \%$$

Molecular Weight of Gas

$$M_S = 28.952 \times (1 - B_{WO}) + 18 \times B_{WO} \Rightarrow$$
$$28.952 \times (1 - 0.343) + 18 \times (0.343) = 25.20 \text{ lb/lb mole}$$

Gas Stream Velocity

$$V_S = 85.48 \times C_P \times \left(\frac{T_S \times \Delta P}{P_S \times M_S} \right)^{1/2} \Rightarrow$$
$$85.48 \times (0.82) \times \left(\frac{755.0 \times 0.908}{30.02 \times 25.20} \right)^{1/2} = 66.73 \text{ fps}$$

Stack Volumetric Flow Rate

$$ACFM = A_S \times V_S \times 60 \Rightarrow (11.34) \times (66.73) \times (60) \Rightarrow$$
$$= 45403 \text{ CFM}$$



Ajax Paving, Industries

Plant No. 4

Annual Emissions Compliance Test

Calculation of Emissions

RUN # 3 (cont)

Stack Flow Corrected to STP

$$SCFM = ACFM \times (1 - BWO) \times \left(\frac{T_{STD}}{T_S} \right) \times \left(\frac{P_S}{P_{STD}} \right) \Rightarrow$$
$$45403 \times (1 - 0.343) \times \left(\frac{528}{755.0} \right) \times \left(\frac{30.02}{29.92} \right) = 20931 \text{ CFM}$$

% Isokinetic

$$I = \frac{1.667 \times \left(0.00267 \times V_L + \left(\frac{V_M \times \delta}{T_M} \right) \times \left(P_B + \frac{\Delta H}{13.6} \right) \right) \times T_S}{\theta \times V_S \times P_S \times A_N} \Rightarrow$$
$$\frac{1.667 \times \left(0.00267 \times 420.0 + \left(\frac{37.187 \times 1.0415}{542.4} \right) \times \left(30.02 + \frac{1.085}{13.6} \right) \right) \times 755.0}{60 \times 66.73 \times 30.02 \times 0.000341} \Rightarrow$$

= 100.5 %

Grain Loading

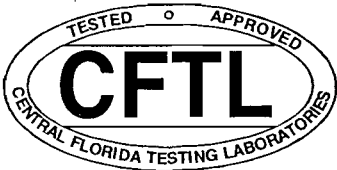
$$C_s = 0.0154 \times \left(\frac{M_N}{SCF} \right) \Rightarrow$$
$$0.0154 \times \left(\frac{33.0}{37.93} \right) = 0.0134 \text{ GRAINS/SCF}$$

Emission Rate

$$E = C_s \times SCFM \times \left(\frac{60}{7000} \right) \Rightarrow 0.0134 \times 20931 \times \left(\frac{60}{7000} \right) = 2.40 \text{ lb/hr}$$

Allowable Emission Rate

$$E_a = 0.04$$



CENTRAL FLORIDA TESTING LABORATORIES, INC.

VISIBLE EMISSIONS OBSERVATION FORM

METHOD USED (CIRCLE ONE)
METHOD 9 203A 203B OTHER: _____

FORM NUMBER _____ PAGE 1 OF 1

COMPANY NAME
Ajax Paving Industries, Inc.

STREET ADDRESS CITY
1740 U.S. 27 South Moore Haven

MAILING ADDRESS
510 Gene Green Road

CITY STATE ZIP
Nokomis Florida 34275

PHONE/KEY CONTACT SOURCE PERMIT NUMBER
_____ **7770060-003-AC**

CONTINUED ON VEO NUMBER _____

OBSERVATION DATE START TIME END TIME
2-10-2000 7:44:00 AM 8:43:45 AM

PROCESS EQUIPMENT OPERATING MODE
Drum Mix Asphalt Plant * **See Below**

CONTROL EQUIPMENT OPERATING MODE
Baghouse System **Continuous**

MIN	SEC				MIN	SEC			
	0	15	30	45		0	15	30	45
1	0	5	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	5	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	5	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	5	0	0	39	5	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	5	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	5	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	5	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	5
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	5	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	5	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	5	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	5	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

DESCRIBE EMISSION PT.
Rectangular exhaust stack on NW end of baghouse.

DISTANCE TO EMISS. PT. DIRECTION TO EMISS. PT. (DEGREES)
 START ~600' END ~600' START 343°(NW) END 343°(NW)

HEIGHT OF EMISS. PT. HEIGHT TO EMISS. PT. REL. TO OBSERVER
 START ~20' END ~20' START ~15' END ~15'

VERTICAL ANGLE TO OBS. PT. DIRECTION TO OBS. PT. (DEGREES)
 START 30° END 30° START 325°(NW) END 325°(NW)

APPROX. DISTANCE AND DIRECTION FROM EMISS. PT. TO OBSERVER PT.
 START ~500' SW of emiss. pt. END ~500' SW of emiss. pt.

DESCRIBE EMISSIONS
 START None END None

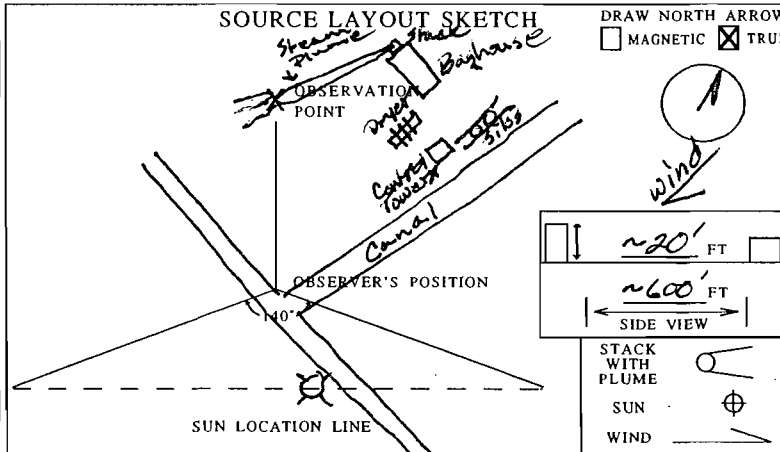
EMISSION COLOR WATER DROPLET PLUME
 START None END None ATTACHED DETACHED NONE

DESCRIBE PLUME BACKGROUND
 START Clear Blue sky END Partly cloudy sky

BACKGROUND COLOR SKY CONDITIONS
 START Blue END Blue/white START Clear END Scattered

WIND SPEED WIND DIRECTION
 START 0-5 mph END 0-5 mph START NE END NE

AMBIENT TEMPERATURE WET BULB TEMP. PERCENT RH
 START 45.5°F END 50.1°F _____ 76%



LAT: _____ LONG: _____ DECLINATION _____

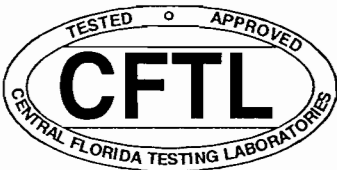
AVERAGE OPACITY HIGHEST SIX MINUTE INTERVAL
0.3% 0.6%

ADDITIONAL INFORMATION
VE test performed simultaneously with Run #1 of particulate test. No objectionable odors nor fugitives detected. * = See Process Weight and Plant Operating Parameter section of this test.

OBSERVER'S NAME (PRINT) DATE
Christopher L. Briley 2-10-2000

OBSERVER'S SIGNATURE ORGANIZATION
Christopher L. Briley **Central Florida Testing Laboratories, Inc.**

CERTIFIED BY DATE
E.T.A. - Tampa **8-25-1999**



CENTRAL FLORIDA TESTING LABORATORIES, INC.

VISIBLE EMISSIONS OBSERVATION FORM

METHOD USED (CIRCLE ONE)
METHOD 9 203A 203B OTHER:

FORM NUMBER: _____ PAGE 1 OF 1

COMPANY NAME
Ajax Paving Industries, Inc.

STREET ADDRESS CITY
1740 U.S. 27 South Moore Haven

MAILING ADDRESS
510 Gene Green Road

CITY STATE ZIP
Nokomis Florida 34275

PHONE/KEY CONTACT SOURCE PERMIT NUMBER
7770060-003-AC

CONTINUED ON VEO NUMBER: _____

OBSERVATION DATE START TIME END TIME
2-10-2000 9:27:00 AM 10:26:45 AM

PROCESS EQUIPMENT OPERATING MODE
Drum Mix Asphalt Plant * See Below

CONTROL EQUIPMENT OPERATING MODE
Baghouse System Continuous

MIN	SEC				MIN	SEC			
	0	15	30	45		0	15	30	45
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	5	0	0
4	0	0	5	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	5	0
7	0	0	0	0	37	0	5	0	0
8	0	0	5	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	5
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	5	0	0
13	0	0	0	0	43	0	0	0	0
14	5	0	0	0	44	0	0	0	5
15	0	0	0	0	45	0	0	0	5
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	5	0	48	5	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	5	50	0	0	5	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	5	0	0	53	5	0	0	0
24	0	0	0	0	54	0	0	0	5
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	5	0	58	5	0	0	0
29	0	0	0	0	59	0	5	0	0
30	0	0	0	0	60	0	0	0	5

DESCRIBE EMISSION PT.
Rectangular exhaust stack exiting baghouse on SW end of baghouse.

DISTANCE TO EMISS. PT. DIRECTION TO EMISS. PT. (DEGREES)
 START **~450'** END **~450'** START **333°(NW)** END **333°(NW)**

HEIGHT OF EMISS. PT. HEIGHT TO EMISS. PT. REL. TO OBSERVER
 START **~20'** END **~20'** START **~15'** END **~15'**

VERTICAL ANGLE TO OBS. PT. DIRECTION TO OBS. PT. (DEGREES)
 START **230** END **230** START **285°(W)** END **285°(W)**

APPROX. DISTANCE AND DIRECTION FROM EMISS. PT. TO OBSERV. PT.
 START **~300' SW of Emiss. pt.** END **~300' SW of Emiss. pt.**

DESCRIBE EMISSIONS
 START **None** END **Lt Gray Smoke**

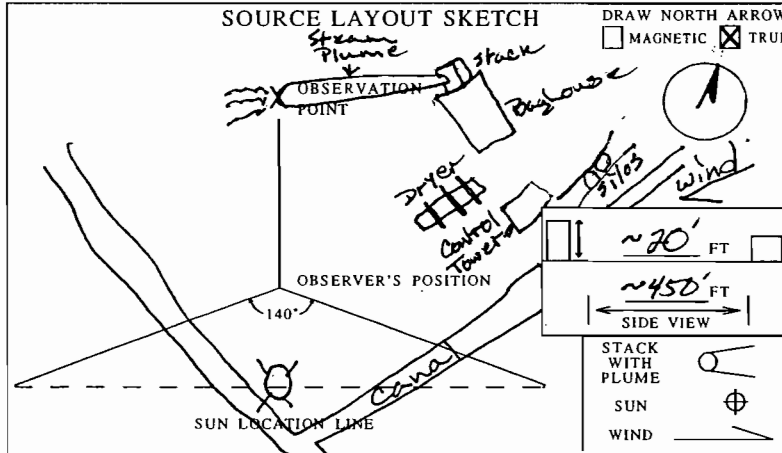
EMISSION COLOR WATER DROPLET PLUME
 START **None** END **Lt. Gray** ATTACHED DETACHED NONE

DESCRIBE PLUME BACKGROUND
 START **Partly cloudy sky** END **Clear Blue sky**

BACKGROUND COLOR SKY CONDITIONS
 START **Blue/white** END **Blue** START **Scattered** END **Clear**

WIND SPEED WIND DIRECTION
 START **0-5 mph** END **0-5 mph** START **NE** END **NE**

AMBIENT TEMPERATURE WET BULB TEMP. PERCENT RH
 START **54.2°F** END **58.9°F** **58%**



LAT: _____ LONG: _____ DECLINATION _____

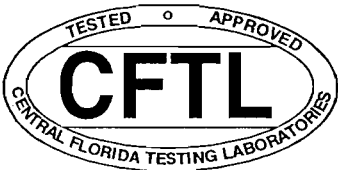
AVERAGE OPACITY: **0.4%** HIGHEST SIX MINUTE INTERVAL: **0.8%**

ADDITIONAL INFORMATION
VE Test performed simultaneously with Run #2 of particulate test. No objectionable odors nor fugitives detected. *See Process Weight and Plant Operating Parameter section of this test.

OBSERVER'S NAME (PRINT) DATE
Christopher L. Briley 2-10-2000

OBSERVER'S SIGNATURE ORGANIZATION
Christopher L. Briley **Central Florida Testing Laboratories, Inc.**

CERTIFIED BY DATE
E.T.A. - Tampa 8-25-1999



CENTRAL FLORIDA TESTING LABORATORIES, INC.

VISIBLE EMISSIONS OBSERVATION FORM

METHOD USED (CIRCLE ONE)
METHOD 9 203A 203B OTHER:

FORM NUMBER: _____ PAGE 1 OF 1

COMPANY NAME
Ajax Paving Industries, Inc.

STREET ADDRESS CITY
1740 U.S. 27 South Moore Haven

MAILING ADDRESS
510 Gene Green Road

CITY STATE ZIP
Nokomis Florida 34275

PHONE/KEY CONTACT SOURCE PERMIT NUMBER
_____ **7770060-003-AC**

CONTINUED ON VEO NUMBER: _____

OBSERVATION DATE: 2-10-2000 START TIME: 10:59:00 AM END TIME: 11:58:45 AM

PROCESS EQUIPMENT OPERATING MODE
Drum Mix Asphalt Plant * See Below

CONTROL EQUIPMENT OPERATING MODE
Baghouse System Continuous

MIN	SEC				MIN	SEC			
	0	15	30	45		0	15	30	45
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	5	0
3	0	0	0	0	33	0	0	0	0
4	0	0	5	0	34	0	0	0	0
5	0	0	0	0	35	0	5	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	5	0	0	0	38	0	0	5	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	5	0	0	0
12	0	0	0	5	42	0	0	0	0
13	0	0	0	0	43	0	0	0	5
14	0	0	0	0	44	0	0	0	0
15	0	0	5	0	45	0	0	0	0
16	0	0	0	0	46	0	5	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	5
19	5	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	5	51	5	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	5	0
24	0	0	0	0	54	0	0	0	0
25	5	0	0	0	55	0	0	5	0
26	0	0	0	0	56	0	0	0	0
27	0	0	5	0	57	0	0	0	0
28	0	0	0	0	58	0	0	5	0
29	0	0	0	0	59	0	0	0	0
30	0	5	0	0	60	0	0	0	0

DESCRIBE EMISSION PT.
Rectangular exhaust stack exiting baghouse on NW end of baghouse.

DISTANCE TO EMISS. PT. DIRECTION TO EMISS. PT. (DEGREES)
 START *~500'* END *~500'* START *336°(NNW)* END *336°(NNW)*

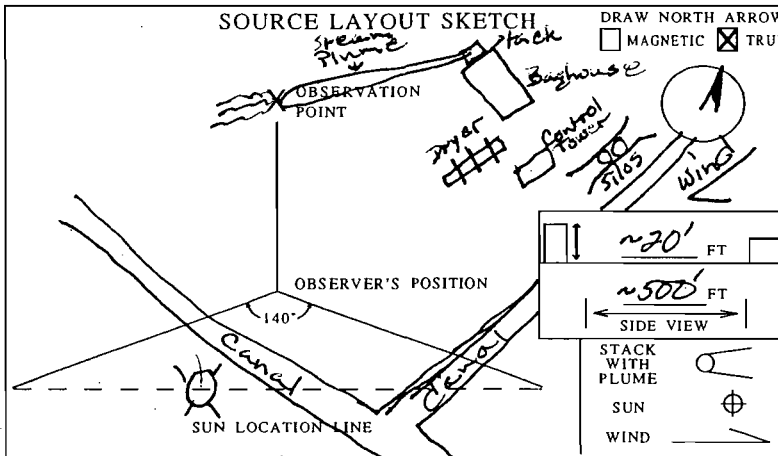
HEIGHT OF EMISS. PT. HEIGHT TO EMISS. PT. REL. TO OBSERVER
 START *~20'* END *~20'* START *~15'* END *~15'*

VERTICAL ANGLE TO OBS. PT. DIRECTION TO OBS. PT. (DEGREES)
 START *18°* END *18°* START *313°(NW)* END *313°(NW)*

APPROX. DISTANCE AND DIRECTION FROM EMISS. PT. TO OBSERV. PT.
 START *~300' SW of emiss. pt.* END *~300' SW of emiss. pt.*

DESCRIBE EMISSIONS
 START *None* END *None*
 EMISSION COLOR WATER DROPLET PLUME
 START *None* END *None* ATTACHED DETACHED NONE

DESCRIBE PLUME BACKGROUND
 START *Clear Blue Sky* END *Clear Blue Sky*
 BACKGROUND COLOR SKY CONDITIONS
 START *Blue* END *Blue* START *Clear* END *Clear*
 WIND SPEED WIND DIRECTION
 START *3-7mph* END *3-7mph* START *NE* END *NE*
 AMBIENT TEMPERATURE WET BULB TEMP. PERCENT RH
 START *58.0°F* END *63.6°F* _____ *44%*



LAT: _____ LONG: _____ DECLINATION: _____

AVERAGE OPACITY: 0.4% HIGHEST SIX MINUTE INTERVAL: 0.6%

ADDITIONAL INFORMATION
*VE test performed simultaneously with Run # 3 of particulate test. No objectionable odors nor fugitives detected. *See Process Weight and Plant Operating Parameter section of this test.*

OBSERVER'S NAME (PRINT) **Christopher L. Briley**

OBSERVER'S SIGNATURE DATE
Christopher L. Briley 2-10-2000

ORGANIZATION
Central Florida Testing Laboratories, Inc.

CERTIFIED BY DATE
E.T.A. - Tampa 8-25-1999



Manifest #: 238587

CERTIFICATE OF ANALYSIS

TO: AJAX PAVING Plant - 4
MOORE HAVEN, FLORIDA

FROM: HOWCO ENVIRONMENTAL SERVICES
843 43RD ST. SOUTH
ST. PETERSBURG, FL 33711

PHONE: 1-800-435-8467
DISPATCH: 1-800-872-6715

SAMPLE TYPE: FUEL OIL #5
BATCH : 1339, Tank 121
DATE : February 9, 2000

PARAMETER	CONCENTRATION	UNIT	TEST METHOD
ARSENIC	< 1	PPM	EPA SW-846(3050-7061)
CADMIUM	< 2.0	PPM	EPA SW-846(3040-7130)
CHROMIUM	< 5.0	PPM	EPA SW-846(3040-7190)
LEAD	< 100	PPM	EPA SW-846(3040-7420)
SULFUR	0.43	%	ASTM D4294
FLASHPOINT (PMCC)	> 140	°F	ASTM D93
TOTAL HALOGENS	880	PPM	EPA SW-846 (9075)
SEDIMENT	1.4	%	ASTM D96
WATER	0.6	%	ASTM D95
API GRAVITY	28.4	60°F	ASTM D287
HEAT OF COMBUSTION	140K	BTU/GAL.	ASTM D240
SPECIFIC GRAVITY	0.884	60°F	ASTM D1298
PCB'S	< 2	PPM	EPA SW-846 (8080)

All analysis were performed in accordance with EPA, ASTM or other FDER approved procedures.
Quality Assurance Officer

REMARKS: 7.35 lbs/gallon

3701 Central Avenue - St. Petersburg, FL 33713 - Tel. 727-327-8467 Fax: 727-321-6213

Operations: Tampa Bay - Ocala - Ft. Myers - 24-Hour Emergency Access 1-800-435-8467



CENTRAL FLORIDA TESTING LABORATORIES, INC.

12625 - 40th Street North - Clearwater, Florida 33762
(727)572-9797 (800)248-CFTL

AJAX PAVING IND. - Plant No.4

Portable BCE Drum Mix Asphalt Plant

Initial Emissions Compliance Test

Determination Of Sulfur Dioxide Emissions

Date	Run No.	Time		Total Fuel Consumed (gal)	
		Start	Stop	Start	Stop
02/10/00	1	7:35 a.m.	8:50 a.m.	0	559.4
02/10/00	2	9:20 a.m.	10:35 a.m.	0	550.7
02/10/00	3	10:55 a.m.	12:05 p.m.	0	515.9

FUEL CONSUMPTION

$$F_c = \frac{\text{Total fuel consumed}}{\text{Burner operation time}}$$

$$\text{Run No.1} \quad F_c = \frac{559.4 \text{ gallons}}{1 \text{ hour } 15 \text{ minutes}} = 447.5 \text{ gal/hr}$$

$$\text{Run No.2} \quad F_c = \frac{550.7 \text{ gallons}}{1 \text{ hour } 15 \text{ minutes}} = 440.6 \text{ gal/hr}$$

$$\text{Run No.3} \quad F_c = \frac{515.9 \text{ gallons}}{1 \text{ hour } 10 \text{ minutes}} = 442.2 \text{ gal/hr}$$

Maximum Sulfur Dioxide Emissions

$$ES_{O_2} = \frac{0.0043 \text{ lb-S/lb-fuel}(7.350 \text{ lb-fuel/gal})(64 \text{ gm/gm-mole } SO_2)}{32 \text{ gm/gm-mole } O_2} \quad [Q \text{ fuel}]$$

$$ES_{O_2} = 0.0632 \text{ lb-S/gal } [Q \text{ fuel}]$$

$$\text{Run No.1} \quad ES_{O_2} = 0.0632 \text{ lb-S/gal } (447.5 \text{ gal/hr}) = 28.29 \text{ lb/hr}$$

$$\text{Run No.2} \quad ES_{O_2} = 0.0632 \text{ lb-S/gal } (440.6 \text{ gal/hr}) = 27.85 \text{ lb/hr}$$

$$\text{Run No.3} \quad ES_{O_2} = 0.0632 \text{ lb-S/gal } (442.2 \text{ gal/hr}) = 27.95 \text{ lb/hr}$$



**CENTRAL FLORIDA TESTING
LABORATORIES, INC.**

12625 - 40th Street North - Clearwater, Florida 33762
(727)572-9797 (800)248-CFTL

***AJAX Paving Industries, Inc.
Portable BCE Drum Mix Asphalt Plant
Initial Emissions Compliance Test
Clarification of Raw Data Sheet
Lab No. 130463***

<u>Run No. 1</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>TOTAL</u>
Imp. Wt: Final	790.2	700.0	472.7	471.4	680.0	
Initial	<u>550.0</u>	<u>561.7</u>	<u>451.9</u>	<u>464.6</u>	<u>670.0</u>	
	240.2	138.3	20.8	6.8	10.0	<u>416.1 gm</u>

<u>Particulate</u>	<u>Filter Paper</u>	<u>Probe Wash</u>	
Final	0.5776	114.8633	
Initial	<u>0.5621</u>	<u>114.8462</u>	
	0.0155	0.0171	<u>0.0326 gm</u>

<u>Run No. 2</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>TOTAL</u>
Imp. Wt: Final	809.6	672.6	480.7	470.7	686.3	
Initial	<u>552.1</u>	<u>561.5</u>	<u>451.7</u>	<u>464.4</u>	<u>676.2</u>	
	257.5	111.1	28.3	6.3	14.1	<u>417.3 gm</u>

<u>Particulate</u>	<u>Filter Paper</u>	<u>Probe Wash</u>	
Final	0.5740	108.9368	
Initial	<u>0.5591</u>	<u>108.9194</u>	
	0.0149	0.0174	<u>0.0323 gm</u>

<u>Run No. 3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>TOTAL</u>
Imp. Wt: Final	801.8	694.2	478.1	464.7	690.8	
Initial	<u>551.7</u>	<u>562.0</u>	<u>451.7</u>	<u>464.2</u>	<u>680.0</u>	
	250.1	132.2	26.4	0.5	10.8	<u>420.0 gm</u>

<u>Particulate</u>	<u>Filter Paper</u>	<u>Probe Wash</u>	
Final	0.5759	109.2703	
Initial	<u>0.5606</u>	<u>109.2526</u>	
	0.0153	0.0177	<u>0.0330 gm</u>



CENTRAL FLORIDA TESTING LABORATORIES, INC.
1400 Starkey Road - Largo, FL 34641
(813)581-7019 (800)248-CFTL

MOISTURE COLLECTED

LOCATION: *Ajax Paving - Plant 4*
DATE: *2-10-2000*

RUN NO. 1

IMPINGER NO.

1 2 3 4 5

FINAL WEIGHT

<i>790.2</i>	<i>700.0</i>	<i>472.7</i>	<i>471.4</i>	<i>680.0</i>
--------------	--------------	--------------	--------------	--------------

INITIAL WEIGHT

<i>550.0</i>	<i>561.7</i>	<i>451.9</i>	<i>464.6</i>	<i>670.0</i>
--------------	--------------	--------------	--------------	--------------

DIFFERENCE

<i>240.2</i>	<i>138.3</i>	<i>20.8</i>	<i>6.8</i>	<i>10.0</i>
--------------	--------------	-------------	------------	-------------

TOTAL *416.1*

RUN NO. 2

IMPINGER NO.

1 2 3 4 5

FINAL WEIGHT

<i>809.6</i>	<i>672.6</i>	<i>480.0</i>	<i>470.7</i>	<i>682.3</i>
--------------	--------------	--------------	--------------	--------------

INITIAL WEIGHT

<i>552.1</i>	<i>561.5</i>	<i>451.7</i>	<i>464.4</i>	<i>676.2</i>
--------------	--------------	--------------	--------------	--------------

DIFFERENCE

<i>257.5</i>	<i>111.1</i>	<i>28.3</i>	<i>6.3</i>	<i>14.1</i>
--------------	--------------	-------------	------------	-------------

TOTAL *417.3*

RUN NO. 3

IMPINGER NO.

1 2 3 4 5

FINAL WEIGHT

<i>801.8</i>	<i>694.2</i>	<i>478.1</i>	<i>464.7</i>	<i>690.8</i>
--------------	--------------	--------------	--------------	--------------

INITIAL WEIGHT

<i>551.7</i>	<i>562.0</i>	<i>451.7</i>	<i>464.2</i>	<i>680.0</i>
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DIFFERENCE

<i>250.1</i>	<i>132.2</i>	<i>26.4</i>	<i>0.5</i>	<i>10.8</i>
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TOTAL *420.0*

PARTICULATE MATTER COLLECTED

PLANT Ajax Paving UNIT TESTED Portable BCE Drum Mix Plant DATE 02-10-2000

RUN NO. 1

FILTER PAPER
FILTER NO. 90
1st Weighing 0.5775 2/18 7:30am
2nd Weighing 0.5776 2/19 7:00am
3rd Weighing 0.5776 2/21 8:30am
4th Weighing _____
Final Weight 0.5776
Tare Weight 0.5621
0.0155

32.6

PROBE WASH
BEAKER NO. 02
VOLUME 200,125
1st Weighing 114.8640 2/18 7:50
2nd Weighing 114.8640 2/19 7:31am
3rd Weighing 114.8639 2/21 9:00am
4th Weighing _____
Residue Weight 0.0007
Probe Wash Weight 114.8633
Tare Weight 114.8462
0.0171

RUN NO. 2

FILTER PAPER
FILTER NO. 91
1st Weighing 0.5739 2/18 7:33am
2nd Weighing 0.5740 2/19 7:15am
3rd Weighing 0.5740 2/21 8:34am
4th Weighing _____
Final Weight 0.5740
Tare Weight 0.5591
0.0149

32.3

PROBE WASH
BEAKER NO. 03
VOLUME 200,150
1st Weighing 108.9376 2/18 7:55am
2nd Weighing 108.9375 2/19 7:34am
3rd Weighing 108.9375 2/21 9:04am
4th Weighing _____
Residue Weight 0.0007
Probe Wash Weight 108.9368
Tare Weight 108.9194
0.0174

RUN NO. 3

FILTER PAPER
FILTER NO. 92
1st Weighing 0.5760 2/18 7:37am
2nd Weighing 0.5758 2/19 7:20am
3rd Weighing 0.5759 2/21 8:38am
4th Weighing _____
Final Weight 0.5759
Tare Weight 0.5606
0.0153

33.0

PROBE WASH
BEAKER NO. 09
VOLUME 200,150
1st Weighing 109.2710 2/18 7:58am
2nd Weighing 109.2710 2/19 7:37am
3rd Weighing 109.2710 2/21 9:07am
4th Weighing _____
Residue Weight 0.0007
Probe Wash Weight 109.2703
Tare Weight 109.2526
0.0177

FILTER & ACETONE BLANKS

FILTER PAPER
FILTER NO. 102
1st Weighing 0.5381 2/18 7:40am
2nd Weighing 0.5382 2/19 7:25am
3rd Weighing 0.5381 2/21 8:42am
4th Weighing _____
Final Weight 0.5381
Tare Weight 0.5381
0.0000

ACETONE
BEAKER NO. 24
VOLUME 100
1st Weighing 99.6215 2/18 8:02am
2nd Weighing 99.6214 2/19 7:41am
3rd Weighing 99.6214 2/21 9:10am
4th Weighing _____
Final Weight _____
Tare Weight 99.6214
Residue Weight 99.6212
0.0002

Weighed By: _____

Verified By: B. Balk Jr.

Date	Run No.	Time		Mix Temp. (°F)	Virgin Agg. (tph)	Liquid Asphalt (tph)	RAP (tph)	Production Rate (tph)	Total Tons Produced		Fuel Oil Consumption		Baghouse		Type Asphalt Produced
													Pressure Drop (Inches H2O)	Inlet Temp. (°F)	
		Start	Stop						Start	Stop	Start	Stop	Start	Stop	
02/10/00	1	7:35 a.m.		328	176	15.9	0	192	0.0	0.0	4.8	338	FDOT		
		7:55 a.m.		325	179	16.0	0	195							
		8:15 a.m.		327	179	16.2	0	195							
		8:35 a.m.		322	178	16.2	0	194							
			8:50 a.m.	325	180	16.4	0	196						243.2	559.4
02/10/00	2	9:20 a.m.		328	173	16.0	0	189	0.0	0.0	4.9	324	FDOT		
		9:40 a.m.		325	176	16.1	0	192							
		10:00 a.m.		327	178	16.3	0	194							
		10:20 a.m.		322	178	16.3	0	194							
			10:35 a.m.	325	177	16.3	0	193						240.6	550.7
02/10/00	3	10:55 a.m.		325	180	16.5	0	196	0.0	0.0	4.7	332	FDOT		
		11:15 a.m.		325	176	16.2	0	192							
		11:35 a.m.		324	177	16.2	0	193							
		11:55 a.m.		324	176	16.4	0	192							
			12:05 p.m.	324	176	16.2	0	192						225.3	515.9

AJAX PAVING, IND. - Plant No.4
 Portable BCE Drum Mix Asphalt Plant
 Initial Emissions Compliance Test
 Plant Operation Parameters



V. SUPPLEMENTAL INFORMATION

FUGITIVE EMISSION CONTROL

Precautions to control and prevent fugitive emissions will be accomplished at the sites which this asphalt plant will be located in several manners. Any stockpiles at this location or any other location will be kept dampened by sprinkler systems or by water truck to control airborne emissions by prevailing winds. All traffic areas will have an enforced and instructed 5 mph speed limit as well as kept damp by water truck or sprinkler system on an as needed basis to control fugitive emissions.