

RECEIVED  
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BUREAU OF AIR REGULATION

OPERATING PERMIT APPLICATION  
FOR  
REX MODEL- S RELOCATABLE  
CONCRETE BATCH PLANT

APAC-GEORGIA PAVING COMPANY, INC.  
FLORIDA STATE-WIDE PERMIT

APRIL 2000

7775018.002 AC  
Comments \_\_\_\_\_ 003 AO  
App Complete 4/29/02  
except PS Sig & Seal  
removed

Prepared by:

RTP Environmental Associates, Inc.®  
1900 South Highway 14 · Suite 4-B  
Greer, South Carolina 29651

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## 1. INTRODUCTION

### 1.1 Background

APAC-Georgia Paving Company, Inc. (APAC-Georgia) operates a relocatable concrete batch operation (REX Model-S) in Jacksonville, Florida. The facility is part of a state wide permit that allows it to relocate throughout the state, but the counties where the unit will be operating will be contacted with the 7 day advance information form.

### 1.2 Purpose

The purpose of this document is to provide information to the Department of Environmental Protection's Division of Air Resources Management (DEP DARM) for an air quality assessment and review of the proposed APAC-Georgia operations at the Jacksonville site and the subsequent issuance of an operating permit. This facility is permitted under construction permit number (7775018-002-AC).

### 1.3 Scope

The scope of this document is the presentation of the processes to prepare cement. Appendix A contains the appropriate process permit application forms. The supporting emission rate calculations are included in Appendix B. A copy of the **Visible Emissions Certification** is located in Appendix C.

#### 1.4 Site Location and Contact

Figure One shows the location of the potential sites for the Florida operations. APAC-Georgia's concrete batch plant is currently located at Baymeadows and 9A Intersection/exchange in Jacksonville.

Further information concerning this submittal may be obtained from:

Allen Prevatte  
Environmental Scientist  
RTP Environmental Associates, Inc.®  
1900 South Highway 14 Suite 4-B  
Greer, South Carolina 29651  
(864) 848-1303

or

Ms. Denise Ballard  
E/H/S Director  
APAC-Georgia Paving Company, Inc.  
Post Office Box 127  
Greenville, South Carolina 29602  
Office: (864) 292-9550  
FAX: (864) 244-9310



State-Wide Florida

Figure One

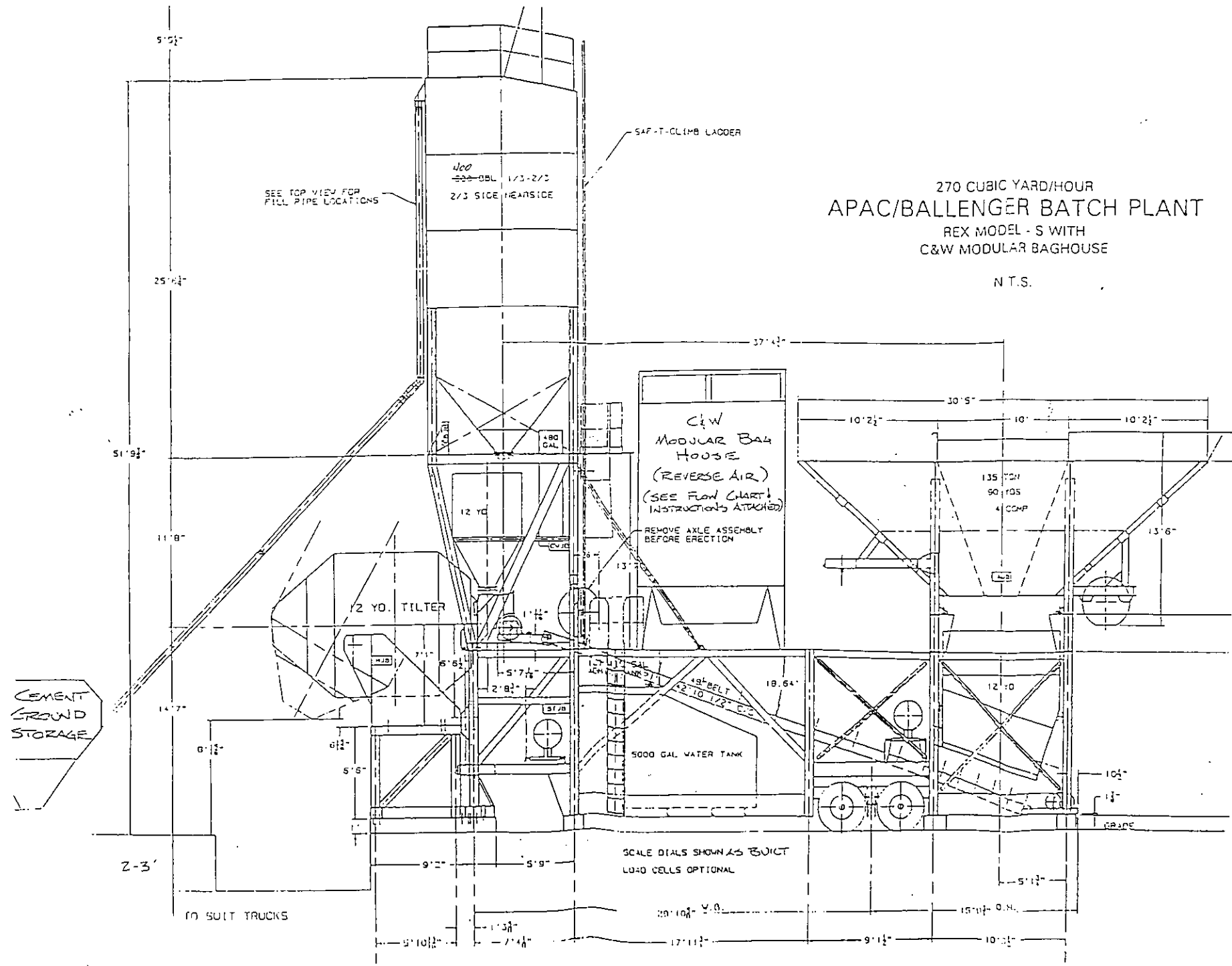
Potential Site Location Map

## 2. PROCESS DESCRIPTION

APAC-Georgia Paving Company, Inc. converts aggregate, sand, cement and water into a concrete for the construction of concrete components. The incoming cement is transferred to the cement silos (see Equipment Sketch given in Figure Two). Aggregate, sand, cement and water from the storage bin are combined in the cement batcher where they are mixed and sent up the enclosed conveyer belt system to the cement weigh batcher. The resulting concrete is weighed and unloaded into trucks via the truck batch. A simplified process flow diagram is given as Figure Three.

In an effort to control fugitive particulate emissions, the following practices will be implemented:

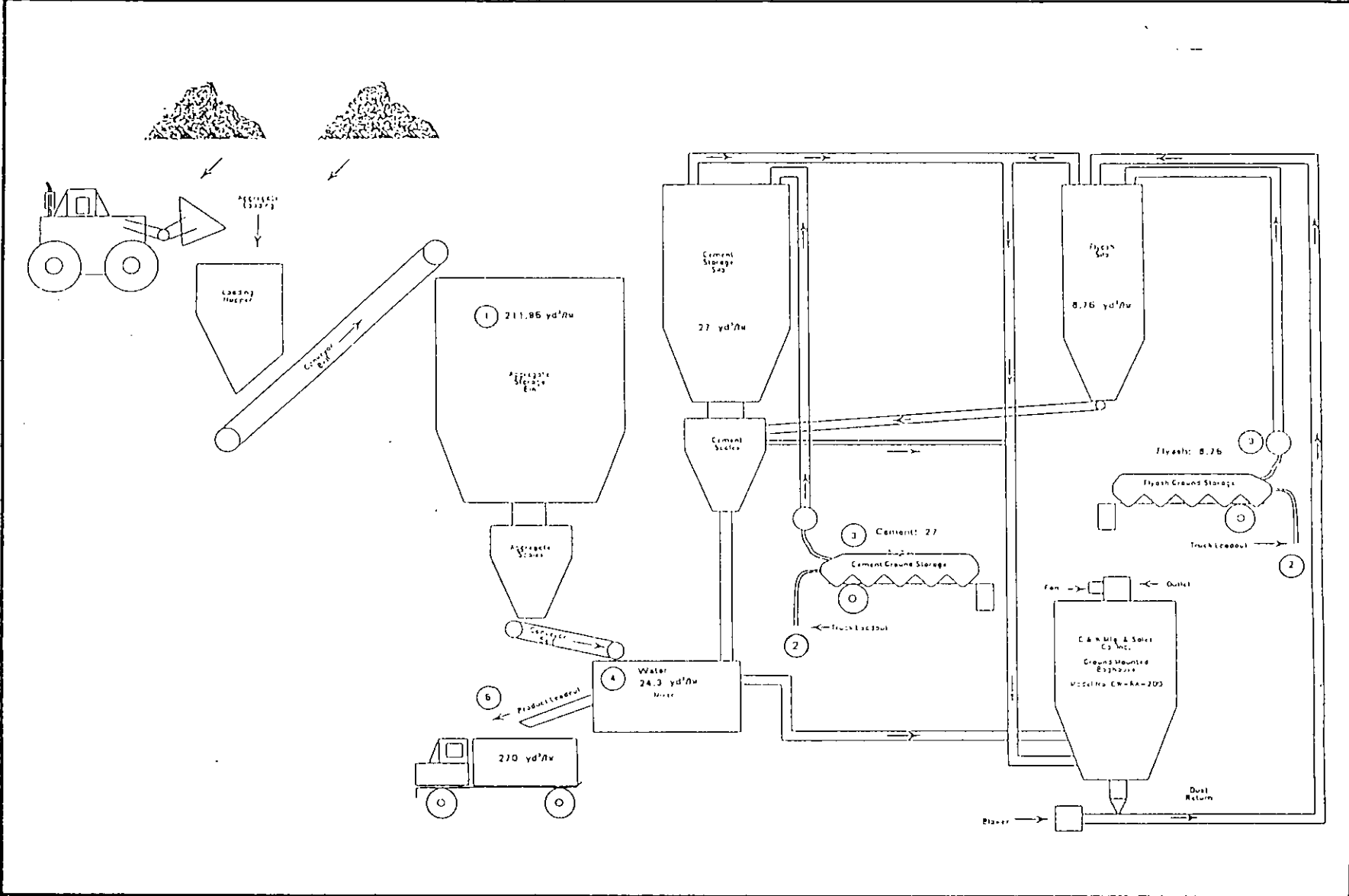
- Water sprays will be used on aggregate storage areas.
- A watering truck will be used to control fugitive emissions from roadways and plant structures.
- Surface areas will be cleaned as needed.



BALLENGER PAVING COMPANY, INC.  
GREENVILLE, SOUTH CAROLINA

RTP ENVIRONMENTAL ASSOCIATES, INC.®  
Project No.: 4040.04

Figure Two  
Equipment Sketch



APAC/BALLENGER PAVING CO., INC.

RTP ENVIRONMENTAL ASSOCIATES, INC.<sup>®</sup>  
 PROJECT NO. 4040.03 DATE: 9/96

FIGURE THREE  
 PROCESS FLOW DIAGRAM



### 3. EMISSION RATE DETERMINATION

The emissions were determined with the use of the EPA AP- 42 Compilation of Emission Factors, Table 11.12-2. Emission factors were available and used for: 1. Sand and aggregate transfer to the elevated bin; 2. Pneumatic unloading of cement and fly ash to ground storage tankers; 3. Pneumatic unloading of cement and fly ash to elevated silo; 4. Weigh hopper loading; and 5. Cement mixer loading.

Other emission factors are given, but not used, for other types of operations typical of these plants. They include: 1. Bucket elevator cement unloading to elevator storage silo (there are no bucket elevators at this plant); 2. Truck mix loading (should have no emissions at this facility because it is wet); 3. Vehicle traffic on unpaved roads (not applicable, as the roads are paved and will be wetted regularly to reduce dust); 4. Wind erosion from sand and aggregate storage piles (water sprays will be used on the piles to minimize fugitive emissions); and 5. Total process emissions, truck mix (same comments as truck mix loading).

The manufacturer of the common dust control unit associated with the last four sources, supplied a guaranteed particulate removal efficiency of 90.0 percent. Emission calculations are given in Appendix B.

#### 4. REGULATORY CONSIDERATIONS

The only regulation that applies to this concrete batch plant is FAC regulation 62-296.414. This regulation requires that visible emissions be limited to five percent opacity. The facility was evaluated for opacity on March 20, 2000. The results of the test demonstrated that this operation is in compliance with this regulation. The results of the opacity evaluation is given in Appendix C.

**Appendix A**

Construction Permit Application



**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: 7775018-002-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: Denise Ballard
2. Owner/Authorized Representative Mailing Address: Organization/Firm: APAC-Georgia Paving Company, Inc. Street Address: 900 West Lee Road City: Greenville State: S.C. Zip Code: 29602
3. Owner/Authorized Representative Telephone Numbers: Telephone: ( 864 ) 292 - 9550 Fax: ( 864 ) 244 - 9310
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: <u>Denise Ballard</u> Date: <u>4/25/00</u>

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

**Professional Engineer Certification**

1. Professional Engineer Name: Paul E. Neil Registration Number:
2. Professional Engineer Mailing Address: Organization/Firm: RTP Environmental Associates, Inc. Street Address: 7752 fay Avenue, Suite C City: San Diego State: California Zip Code: 92037
3. Professional Engineer Telephone Numbers: Telephone: (858)456-8020 Fax: (858) 456-0127

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.*

Paul Neil  
Signature

4-19-00  
Date

(seal)

\* Attach any exception to certification statement.

**Scope of Application**

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>	<b>Processing Fee</b>
ARMS # 7775018-002-AC	270 CY/hr Relocatable Concrete Batch Plant	Operating	Already Paid

**Application Processing Fee**

Check one:  Attached - Amount: \$ \_\_\_\_\_  Not Applicable



**Scope of Application**

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>	<b>Processing Fee</b>
ARMS # 7775018-002-AC	270 CY/hr Relocatable Concrete Batch Plant	Operating	Already Paid

**Application Processing Fee**

Check one:  Attached - Amount: \$ \_\_\_\_\_  Not Applicable

**Construction/Modification Information**

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

**Application Comment**

**This application is being submitted to expedite the processing of the APAC-Georgia State Wide Operating Permit.**

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: _____ East (km): _____ North (km): _____			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): _____ Longitude (DD/MM/SS): _____			
3. Governmental Facility Code: O	4. Facility Status Code: C	5. Facility Major Group SIC Code: 327	6. Facility SIC(s): 3273
7. Facility Comment (limit to 500 characters):  The plant has an existing construction permit to operate state-wide in Florida. Applicant is requesting a state-wide operating permit for the Jacksonville facility.			

#### Facility Contact

1. Name and Title of Facility Contact: Ms. Densie Ballard			
2. Facility Contact Mailing Address: Organization/Firm: APAC-Georgia Paving Company, Inc Street Address: 900 West Lee Road City: Greenville State: S.C. Zip Code: 29602			
3. Facility Contact Telephone Numbers: Telephone: (864) 292- 9550 Fax: (864) 244- 9310			

**Facility Regulatory Classifications**

**Check all that apply:**

1. <input checked="" type="checkbox"/> Small Business Stationary Source? Relocatable <input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source?
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?
4. <input type="checkbox"/> Synthetic Minor Source of HAPs?
5. <input type="checkbox"/> One or More Emissions Units Subject to NSPS?
6. <input type="checkbox"/> One or More Emission Units Subject to NESHAP Recordkeeping or Reporting?
7. Facility Regulatory Classifications Comment (limit to 200 characters): Relocatable minor source; relocatable concrete batch plant

**Rule Applicability Analysis**

62-296.414 – Concrete Batching Plants – limits visible emissions to 5% opacity as determined by US Epa Test Method 9.

62-296-320(4)(C) – Aggregate Storage Areas – Maintain a sufficient moisture content of material through use of water sprays or similar devices to minimize unconfined emissions.

- Yard and Road Area – Remove particulate matter and wet these areas in such a manner as to prevent re-entrainment of particulate matter into the atmosphere

## 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	8.7	24.8	Other	Unit 1
PM10	B	8.7	24.8	Other	Unit 1

**C. FACILITY SUPPLEMENTAL INFORMATION**

Supplemental Requirements

<p>1. Area Map Showing Facility Location:  <input checked="" type="checkbox"/> Attached, Document ID: <u>Figure One</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>2. Facility Plot Plan:  <input checked="" type="checkbox"/> Attached, Document ID: <u>Figure Two</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>3. Process Flow Diagram(s):  <input checked="" type="checkbox"/> Attached, Document ID: <u>Figure Three</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>4. Precautions to Prevent Emissions of Unconfined Particulate Matter:  <input checked="" type="checkbox"/> Attached, Document ID: <u>Page 4</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>5. Supplemental Information for Construction Permit Application:  <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Supplemental Requirements Comment:</p>                      

**III. EMISSIONS UNIT INFORMATION**

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 checked="" 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>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters): The entire emission unit is a relocatable concrete batch unit. The unit is equipped with a Baghouse for an approximate 90.0% efficient control.</p>		
<p>3. Emissions Unit Identification Number: <span style="float: right;"><input type="checkbox"/> No ID</span> ID: #1 <span style="float: right;"><input type="checkbox"/> ID Unknown</span></p>		
<p>4. Emissions Unit Status Code: C</p>	<p>5. Initial Startup Date:</p>	<p>6. Emissions Unit Major Group SIC Code: 16</p>
<p>8. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The emission unit will have the baghouse as a point source and will have the potential for fugitive emissions.</p>		



**Emissions Unit Control Equipment**

1. Control Equipment/Method Description (limit to 200 characters per device or method):  The control equipment is a C&W Mfg. & Sales Co., Inc. ground-mounted baghouse, Model CW-RA-200. The control unit was built October 9, 1979
2. Control Device or Method Code(s): 017 – Fabric filter; medium efficiency approx: 90.0%

**Emissions Unit Details**

1. Package Unit: Manufacturer: _____ Model Number: _____
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:	mmBtu/hr
2. Maximum Incineration Rate: _____ lb/hr	tons/day
3. Maximum Process or Throughput Rate:	
4. Maximum Production Rate:	
5. Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/year	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	

**B. EMISSION POINT (STACK/VENT) INFORMATION**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram?		2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  <ul style="list-style-type: none"> <li>- one baghouse with stack</li> <li>- other miscellaneous opportunities for fugitive emissions</li> </ul>			
3. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
4. Discharge Type Code: F/V	6. Stack Height: 30 feet	7. Exit Diameter: 1.73 feet	
8. Exit Temperature: 68 °F	9. Actual Volumetric Flow Rate: 10,000 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: 8,000 dscfm		12. Nonstack Emission Point Height: varies feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters):  None			

**C. SEGMENT (PROCESS/FUEL) INFORMATION**

**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):		

**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/PM10		2. Pollutant Regulatory Code: NA	
3. Primary Control Device Code: Baghouse	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control: 90%	
6. Potential Emissions: 8.74 lbs/hour		24.9 tons/year	7. Synthetically Limited? [ ] No
8. Emission Factor: EPA's AP-42 Reference: Table 11.12-2		9. Emissions Method Code: 3	
10. Calculation of Emissions (limit to 600 characters):			
$\frac{8.74}{2000} \times 365$			
11. Pollutant Potential Emissions Comment (limit to 200 characters):			

**Allowable Emissions** Allowable Emissions \_\_\_\_\_ of \_\_\_\_\_

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



**G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION**

**Supplemental Requirements**

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input 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:

**Appendix B**

Emission Rate Calculations

APAC/Ballenger Paving Company, Inc.

Mass Balance at 270 yd<sup>3</sup>/hr

<u>Source</u>	<u>Material</u>	<u>Rate (lbs/hr)</u>	<u>Rate (yd<sup>3</sup>/hr)</u>
1. Sand and Aggregate Transfer to Elevated Bin	Sand & Agg.	847,800	<del>211.95</del>
2. Pneumatic Unloading of Cement & Flyash to Ground Storage Tankers	Cement	108,000	<del>27</del>
	Flyash	27,000	<del>6.75</del>
3. Pneumatic Unloading of Cement & Flyash to Elevated Silo	Cement	108,000	<del>27</del>
	Flyash	27,000	<del>6.75</del>
4. Weigh Hopper Loading	Sand & Agg.	847,800	211.95
	Cement	108,000	27
	Flyash	27,000	6.75
	Water	97,200	<del>24.3</del>
5. Cement Mixer Loading	Mixed Cement	1,080,000	<del>270</del>



APAC/Ballenger Paving Company, Inc.

Potential Particulate Emission Rate at 270 yd<sup>3</sup>/hr

AT A BAGHOUSE EFFICIENCY OF 90.0%

<u>Source</u>	<u>Mass Throughput yd<sup>3</sup>/hr</u>	<u>Uncontrolled Emission Factor lbs/yd<sup>3</sup></u>	<u>Uncontrolled Emission lbs/hr</u>
1. Sand and Aggregate Transfer to Elevated Bin	211.95 X	.05	10.6
2. Pneumatic Unloading of Cement & Flyash to Ground Storage Tankers	33.75 X	.07	2.36
3. Pneumatic Unloading of Cement & Flyash to Elevated Silo	33.75 X	.07	2.36
4. Weigh Hopper Loading	270 X	.04	10.8
5. Cement Mixer Loading	270 X	.07	18.9
		Total Uncontrolled Particulate =	45.02

Source #1 is controlled by water spray, with approximately a 50% fugitive reduction.  
Source #2, 3, 4, and 5 are controlled with a baghouse that has a 90.0% removal efficiency.

Actual Emission (Controlled)

Source #1	=	10.6 lbs/hr x (1-.50)	=	5.30 lbs/hr
Source #2	=	2.36 lbs/hr x (1-.90)	=	0.236 lbs/hr
Source #3	=	2.36 lbs/hr x (1-.90)	=	0.236 lbs/hr
Source #4	=	10.8 lbs/hr x (1-.90)	=	1.080 lbs/hr
Source #5	=	18.9 lbs/hr x (1-.90)	=	<u>1.890 lbs/hr</u>
<b>TOTAL</b>			=	8.742 lbs/hr
		<u>5710 hrs/yr</u>		
		8.74 lbs/hr x		
		2000 lbs/ton	=	24.9 tons/yr

Precautions to Prevent Emissions of Unconfined Particulate Matter

1. Baghouse controls unconfined emissions from the weigh hopper and the on-site rotary mixer.
2. Aggregate Piles will be wetted as needed for minimizing wind erosion.
3. Driveway areas are wetted if needed to minimize unconfined particulate from vehicular traffic and wind.

## Appendix C

### Visible Emissions Compliance Certification



# CONTROLLED ENVIRONMENTS FOR INDUSTRY, INC.

P.O. Box 10428 • Jacksonville, FL 32247 • (904) 396-6181

---

March 20, 2000

Corky Lane  
APAC Georgia, Ballenger Paving Division  
P.O. Box 127  
Greenville, SC 29602

Re. Visible Emissions Test

Dear Corky,

Our visible emissions reader, Richard Springer was at your batch plant here in Jacksonville to conduct visible emissions testing at 10:00 a.m. on Monday, March 20, 2000. Wayne Walker of the city of Jacksonville Regulatory & Environmental Services Department, Air & Water Quality Division was present to witness the test.

During the test we were delayed due to down time on your equipment. Total delays added up to one hour. All readings of emissions from your baghouse fan were zero, which is very good. This means you passed the test.

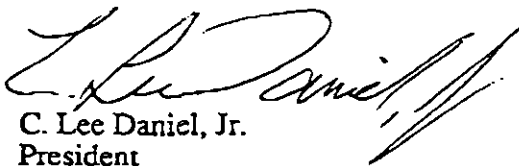
In order for you to maintain your permitted production rate, the cement batching plant must operate at a rate equal to at least 90% of permitted capacity for a period of 30 minutes during the test period. I have enclosed a Process Weight Certification sheet which has been filled out and signed by you.

After you submit your test papers to the city, you will receive a letter limiting your permitted production to not more than 10% above the rate at which you tested.

The certificate qualifying my certified visible emissions reader is enclosed, be sure to include it with your test results when you mail them to the city.

Thank you for this opportunity to work with you.

Sincerely,



C. Lee Daniel, Jr.  
President

**VISIBLE EMISSIONS  
TEST DATA**

**FACILITY:** APAC Georgia, Inc.

**FACILITY ADDRESS:** Baymeadows and 9A Intersection/exchange

**MAILING ADDRESS:** Post Office Box 127  
Greenville, SC 29602

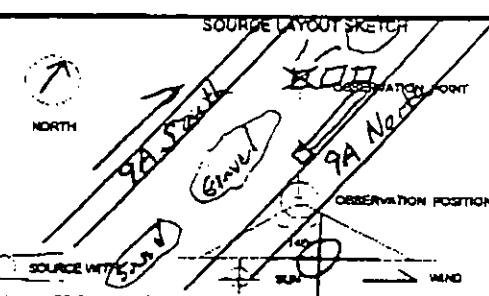
**SOURCE IDENTIFICATION:** Portable Concrete Plant

**COMPANY CONTACT:** Milton "Corky" Lane

**TEST CONDUCTED BY:** Rick Springer

**TEST DATE AND TIME:** March 20, 2000  
1000 - 1130

**COMMENTS:** Standard test. Note the test stopped and started at the plant operated. Therefore, one ninety minutes were required to get a thirty minute test period.

Controlled Environments for Industry, Inc. 4981 Atlantic Blvd., Ste. 9 Jacksonville, FL 32207		PAGE 1 0 1								
		START TIME 10:00		END TIME 11:30						
		OBSERVATION DATE 20 Mar 2000		TIME ZONE Eastern						
SEC/MIN	0	15	30	45	SEC/MIN	0	15	30	45	
FACILITY	APAC Georgia Inc.		1	0	0	0	0	31		
SOURCE	Parabolic Concrete Plant		2	0	0	0	0	32		
ADDRESS	Dawn windows and 9A Intersection / exchange		3	0	0	0	0	33		
CITY	JACKSONVILLE	STATE	FL	4	0	0	0	0	34	
PHONE	(854) 292-6550	SOURCE ID NO.	A018-272461	5	0	0	0	0	35	
PROCESS	OPERATING MODE NORMAL		6	0	0	0	0	36		
CONTROL EQUIP	Beghouse	OPERATING MODE NORMAL		7	0	0	0	0	37	
DESCRIBE EMISSION POINT			8	0	0	0	0	38		
			9	0	0	0	0	39		
HEIGHT OF EMISSION POINT		HEIGHT RELATIVE TO OBSERVER		10	0	0	0	0	40	
START ~85' END ~85'		START ~80' END ~80'		11	0	0	0	0	41	
DISTANCE TO EMISSIONS POINT		DIRECTION TO EM. PT.		12	0	0	0	0	42	
START ~150' END ~150'		START ~338° NW END ~338° NW		13	0	0	0	0	43	
VERTICAL ANGLE TO OBS. PT.			14	0	0	0	0	44		
START ~14° END ~14°			15	0	0	0	0	45		
DESCRIBE EMISSIONS			16	0	0	0	0	46		
START clear Ambient Air END Same			17	0	0	0	0	47		
EMISSION COLOR		WATER DROPLET PLUME YES <input checked="" type="checkbox"/>		18	0	0	0	0	48	
START clear END		ATTACHED DETACHED		19	0	0	0	0	49	
DESCRIBE PLUME BACKGROUND			20	0	0	0	0	50		
START SKY END SKY			21	0	0	0	0	51		
BACKGROUND COLOR		SKY CONDITION		22	0	0	0	0	52	
START white END white		START cloudy END Rain		23	0	0	0	0	53	
WIND SPEED		WIND DIRECTION		24	0	0	0	0	54	
START ~2-6 mph END ~4-10 mph		START SSW END SSW		25	0	0	0	0	55	
AMBIENT TEMPERATURE		WET BULB TEMP		26	0	0	0	0	56	
START 73° END 73°		69°		27	0	0	0	0	57	
		RH 81		28	0	0	0	0	58	
COMMENTS..... 10:15 stopped 11:21 started			29	0	0	0	0	0	59	
10:28 started 11:33 finished			30	0	0	0	0	0	60	
10:31 stopped										
SOURCE LAYOUT SKETCH				HIGHEST OPACITY FOR HIGHEST PERIOD: $\phi$						
				OBSERVER'S NAME (PRINT) Rick Springer						
				SIGNATURE <i>[Signature]</i> DATE 20 Mar 2000						
				ORGANIZATION TECHNICAL SERVICES, INC.						
				Certified by ETA Dec 99						

## Process Weight Certification

Test Date 20 Mar 00 Sampling Time From 10:00 To 10:30

### Statement Of Process Weight:

Company Name APAC-Georgia, Inc.  
 Mailing Address PO Box 127 ~~Greenville~~, ~~SC~~ Greenville, SC 29602  
 Source Identification NA  
 Source Location Bay Meadows and 9A, Jacksonville

### Data On Operating Cycle Time:

Start Of Operation, Time 10:00 AM  
 End Of Operation, Time 11:30 AM  
 Elapsed Time 1 1/2 Hours  
 Idle Time During Cycle 1 Hour  
 Design Process Rating:  
 Process Wgt Rate (Input) 270 yd<sup>3</sup>/Hr Product (Output) Concrete

### Data On Actual Process Rate During Operation Cycle:

(Include Specifications on Fossil Fuels)

Material	<u>Sand + Aggregate</u>	Rate*	<u>197.0 TPH</u>
Material	<u><del>Stone</del> Fly Ash</u>	Rate*	<u>6.3 TPH</u>
Material	<u>Cement</u>	Rate*	<u>25 TPH</u>
	Total Process Weight	Rate*	<u>228 TPH</u>
Product	<u>Concrete</u>	Rate**	

\* For phosphate process expressed as actual tons/hour and as tons P2O5 / Hour.

For Fossil fuel steam generators expressed as BTU/Hour heat input.

\*\* For sulfuric acid plants expressed as 100 % H2SO4 / Hour.

I certify that the above statement is true to the best of my Knowledge and belief.

Signature: [Signature]  
 Title: EHS Director

# VISIBLE EMISSIONS EVALUATOR

This is to certify that

*Richard Springer*

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

275021

Certificate Number

Jacksonville, Florida

Location

December 8, 1999

Date of Issue

*Thomas Fore*  
President

*J. Michael Langford*  
Director of Training



APAC - GEORGIA, INC.  
BALLENGER PAVING DIVISION  
P. O. BOX 127  
GREENVILLE, S.C. 29602-0127  
(864) 292-9550

DETACH STATEMENT BEFORE DEPOSITING

CHECK NUMBER 108837

CHECK DATE 03/15/00

INVOICE NO.	DATE	DESCRIPTION	GROSS	DEDUCTIONS	AMOUNT PAID
7775018002	031400	Invoice Summary	1,000.00		1,000.00
			-----	-----	-----
			1,000.00		1,000.00

Form APACAP39 07/21/98

41614 (10/97)





APAC - GEORGIA, INC.  
BALLENGER PAVING DIVISION  
POST OFFICE BOX 127 • GREENVILLE, S. C. 29602-0127 • (864) 292-9550



RECEIVED

MAR 22 2000

Bill Leffler  
Dept Environmental Protection  
Air Resources Management  
2600 Blair Stone Road MS 5500  
Tallahassee, FL 32399-2400

BUREAU OF AIR REGULATION 3/21/00

Re: Operating Application for 7775018-002-AC

Dear Bill:

I would like to thank you for your help over the last several months on getting our portable concrete batch plant operating in Jacksonville. As mentioned to you on the phone today, our visible emissions test were performed yesterday and we are ready to submit to you the application for operation.

We have included the completed DEP Form No. 62-210.920(7), the processing fee of \$1,000, and two maps denoting the location of the site. As mentioned on the phone, road building has surpassed map making for this area, but I am confident we have provided enough map detail to indicate the proper location.

This facility will operate about six weeks and then will be permanently dismantled. If you need additional information, please contact me.

Sincerely,

Corky Lane  
EHS Director

CONCRETE BATCHING PLANT  
AIR GENERAL PERMIT NOTIFICATION FORM

**Part III. Notification of Intent to Use General Permit**

(Submit this Part to the appropriate permitting office and keep copy of completed form onsite. Instructions follow.)

**Instructions to Owner or Operator:** To give notice to the Department of an eligible facility's intent to use the concrete batching plant air general permit, the owner or operator of the facility must detach and complete Part III of this Concrete Batching Plant Air General Permit Notification Form and submit it to the appropriate Department of Environmental Protection district office or local air pollution control program office which has been delegated permitting authority. Please type or print clearly all information and enclose the appropriate general permit processing fee pursuant to Rule 62-4.050(4)(o), F.A.C. Please note, the form will not be considered complete unless: 1) the processing fee is attached; 2) if appropriate, the proof of notice publication is attached; and 3) if the facility is existing, visible emissions testing was conducted within 60 days of submitting the form and the test results have already been submitted to the appropriate permitting authority or accompany the form. Also, please refer to the instructions for completing Part III of the notification form at the end of the form.

**General Facility Information**

Facility Owner/Company Name (Name of corporation, agency, or individual owner): APAC-Georgia, Inc.		
Site Name (For example, plant name or number): Portable Concrete Batch Plant		
Facility Location: Street Address: 9A at Bay Meadows Rd (See Figure 1 and Topo Map) City: Jacksonville                                      County: Duval                                      Zip Code:		
Facility Start-Up Date: 3/20/00		
Relocatable: <input checked="checked" type="checkbox"/> YES <input type="checkbox"/> NO		

**Owner/Authorized Representative**

Name and Title: Milton "Corky" Lane, EHS Director		
Owner/Authorized Representative Mailing Address: Organization/Firm: Street Address: 200 West Lee Rd City: Greenville, SC                                      County: Greenville                                      Zip Code: 29602		
Owner/Authorized Representative Telephone Number: Telephone:                      (864) 292-9550                      Fax:                      (864) 244-9310		

**Facility Contact (If different from Owner/Authorized Representative)**

Name and Title: Same as Above		
Facility Contact Mailing Address: Organization/Firm: Street Address: City: County: Zip Code:		
Facility Contact Telephone Number: Telephone: ( ) - Fax: ( ) -		

**Notification Type**

Check one:

**NEW:** Notification of a proposed *new* concrete batching plant.

**EXISTING:** Notification of an *existing* permitted concrete batching plant which is *not* changing location.

**RELOCATION:** Notification of an *existing* permitted concrete batching plant which *is* changing location.

**Relocation Information (Complete only if the "RELOCATION" box is indicated above)**

Previous Facility Location: Street Address: City: County: Zip Code:		
Facility Shut-Down Date at Previous Location:		

**Facility Comment**

APAC-Georgia, Inc., Ballenger Paving Division converts aggregate, sand, cement and water into concrete for the construction of concrete components. The incoming cement is transferred to the cement silos (see Equipment Sketch given in Figure Two). Aggregate, sand, cement and water from the storage bin are combined in the cement batcher where they are mixed and sent up the enclosed conveyer belt system to the cement weigh batter. The resulting concrete is weighed and unloaded into trucks via the truck batch. A simplified process flow diagram is given as Figure Three.

A baghouse will be used to control particulate emissions from the processing equipment. Also, in an effort to control fugitive particulate emissions, the following practices will be implemented:

- Water sprays will be used on aggregate storage areas.
- A watering truck will be used to control fugitive emissions from roadways and plant structures.
- Surface areas will be cleaned as needed.

**Emissions Unit(s) Description**

This 270 cu yd/hr relocatable concrete plant is set in Jacksonville, FL. The unit unit utilizes 25 tons/hr cement, 6.3 tons/hr fly ash, 197 tons/hr sand and aggregate. Cement is held in closed silo which hold 75 tons of material. Cement is also held on the ground in pigs which hold 150 tons. Aggregate is fed to system through open bins. Entire operation is connected to a C&W Mfg. & Sales baghouse model CW-RA-200. The device has a fabric filter with a medium efficiency range of at least 90.0%. Visible emissions test we ran with RESD present. A copy of the testing report has been enclosed.

**Surrender of Existing Air Permit(s)**

Check one:

- I hereby surrender all existing air permits authorizing operation of the facility indicated on this form; specifically permit number(s) \_\_\_\_\_.
- No air permits currently exist for the operation of the facility indicated on this form.

**Owner/Authorized Representative Statement**

*I, the undersigned, am the owner or authorized representative of the owner or operator of the facility addressed in this Air General Permit Notification Form. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this notification 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.*

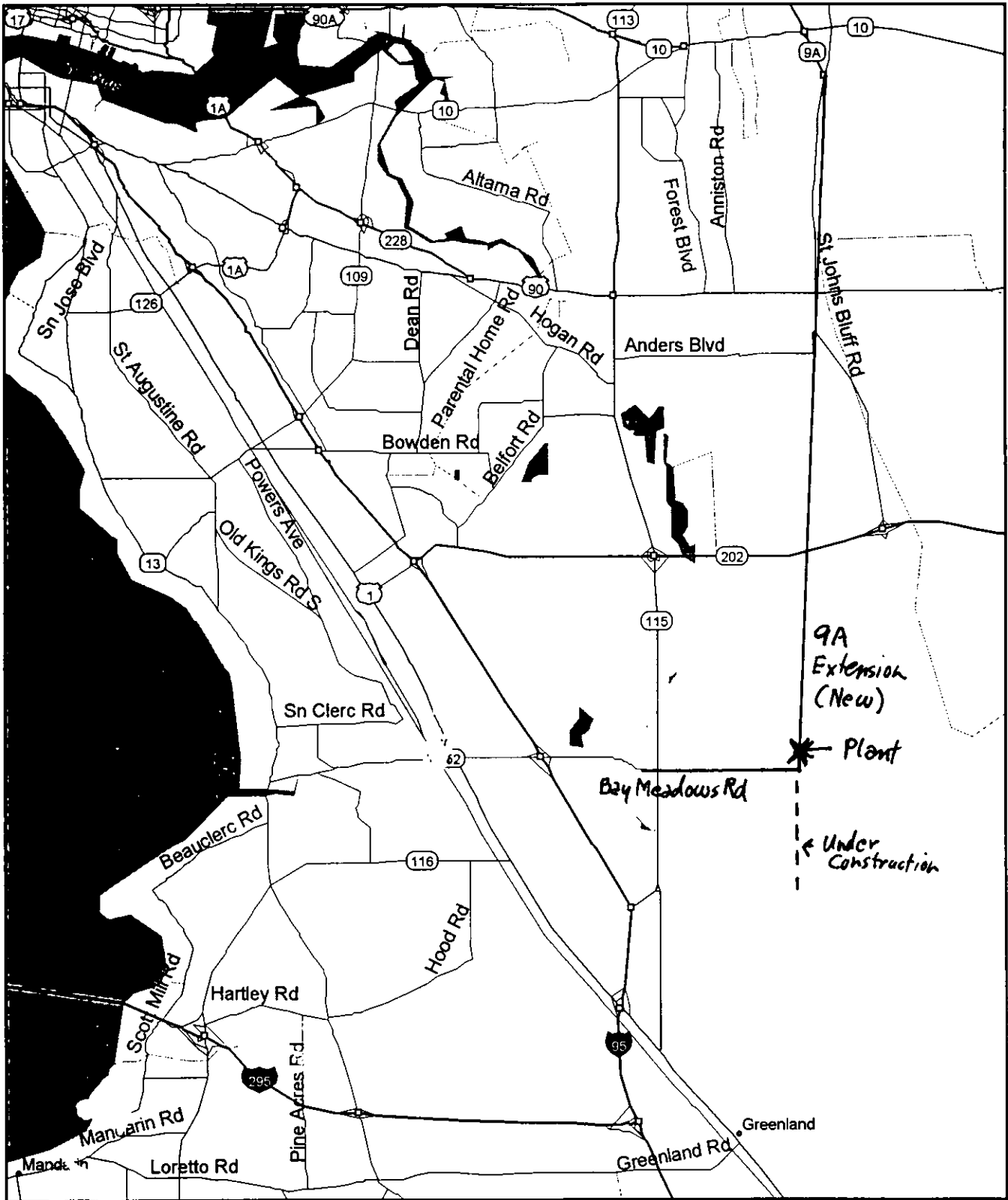
*I will promptly notify the Department of any changes to the information contained in this notification.*

  
\_\_\_\_\_  
Signature

3-21-00  
\_\_\_\_\_  
Date

# Jacksonville Batch Plant

## 9A at Baymeadows Rd



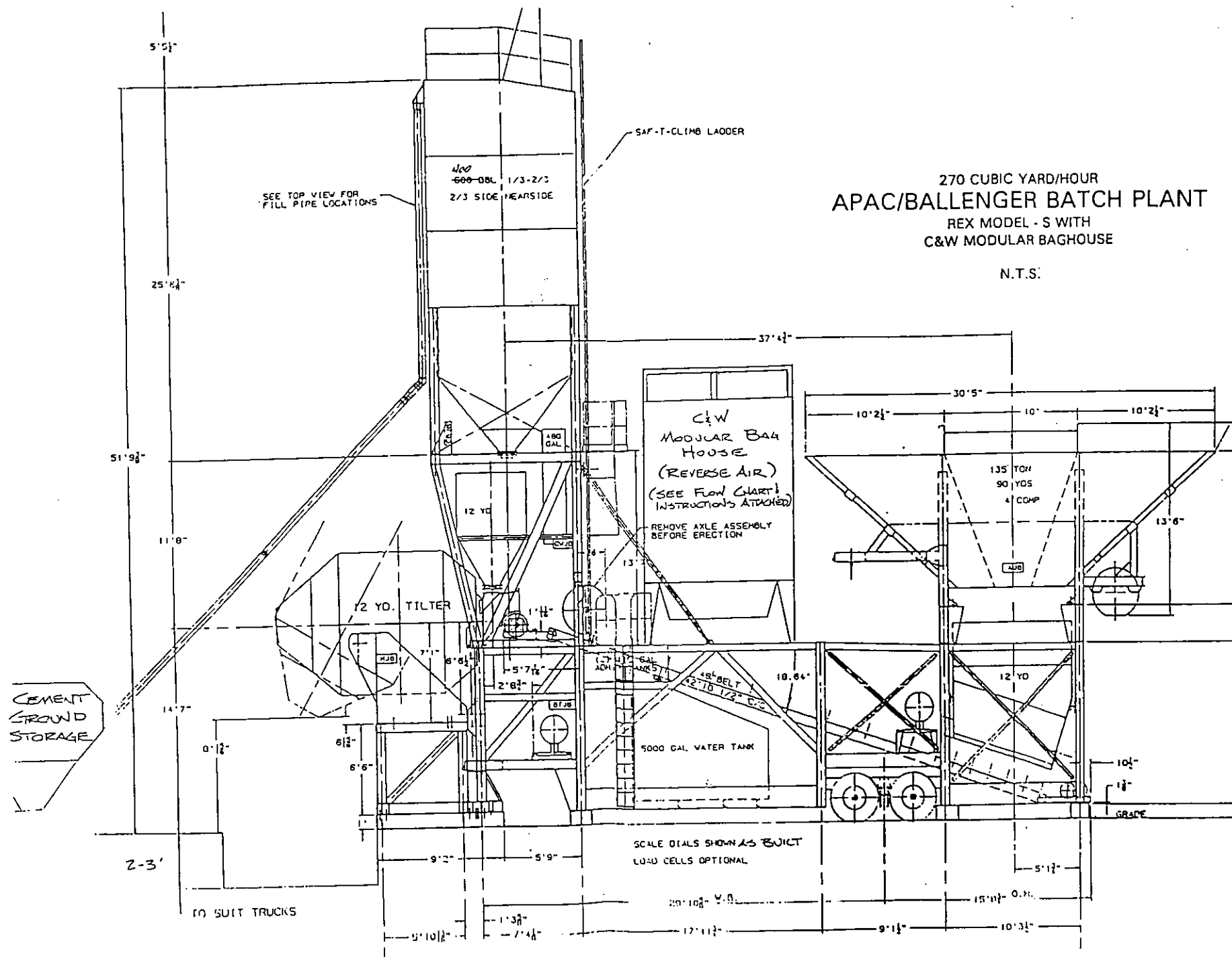
9A  
Extension  
(New)

Plant

Under  
Construction

0 mi 1 2 3

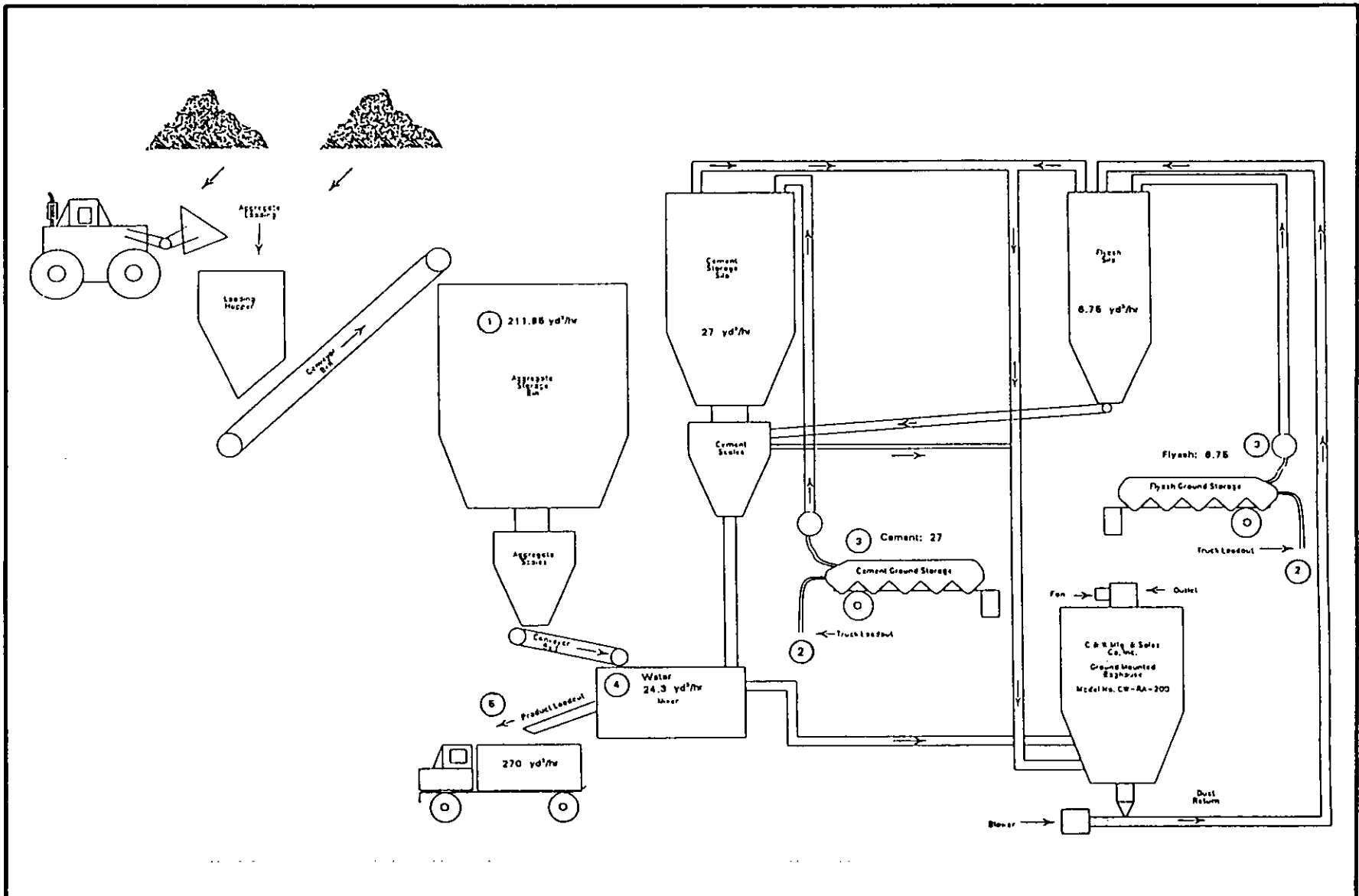
Microsoft Edge



BALLENGER PAVING COMPANY, INC.  
GREENVILLE, SOUTH CAROLINA

RTP ENVIRONMENTAL ASSOCIATES, INC. •  
Project No.: 4040.04

Figure Two  
Equipment Sketch



APAC/BALLENGER PAVING CO., INC.

RTP ENVIRONMENTAL ASSOCIATES, INC.<sup>®</sup>  
 PROJECT NO. 4040.03 DATE: 9/96

FIGURE THREE  
 PROCESS FLOW DIAGRAM



# CONTROLLED ENVIRONMENTS FOR INDUSTRY, INC.

P.O. Box 10428 • Jacksonville, FL 32247 • (904) 396-6181

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March 20, 2000

Corky Lane  
APAC Georgia, Ballenger Paving Division  
P.O. Box 127  
Greenville, SC 29602

Re. Visible Emissions Test

Dear Corky,

Our visible emissions reader, Richard Springer was at your batch plant here in Jacksonville to conduct visible emissions testing at 10:00 a.m. on Monday, March 20, 2000. Wayne Walker of the city of Jacksonville Regulatory & Environmental Services Department, Air & Water Quality Division was present to witness the test.

During the test we were delayed due to down time on your equipment. Total delays added up to one hour. All readings of emissions from your baghouse fan were zero, which is very good. This means you passed the test.

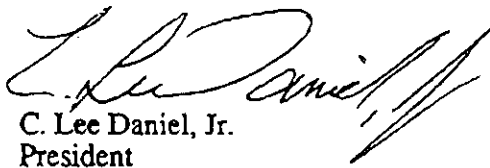
In order for you to maintain your permitted production rate, the cement batching plant must operate at a rate equal to at least 90% of permitted capacity for a period of 30 minutes during the test period. I have enclosed a Process Weight Certification sheet which has been filled out and signed by you.

After you submit your test papers to the city, you will receive a letter limiting your permitted production to not more than 10% above the rate at which you tested.

The certificate qualifying my certified visible emissions reader is enclosed, be sure to include it with your test results when you mail them to the city.

Thank you for this opportunity to work with you.

Sincerely,



C. Lee Daniel, Jr.  
President



**VISIBLE EMISSIONS  
TEST DATA**

**FACILITY:** APAC Georgia, Inc.

**FACILITY ADDRESS:** Baymeadows and 9A Intersection/exchange

**MAILING ADDRESS:** Post Office Box 127  
Greenville, SC 29602

**SOURCE IDENTIFICATION:** Portable Concrete Plant

**COMPANY CONTACT:** Milton "Corky" Lane

**TEST CONDUCTED BY:** Rick Springer

**TEST DATE AND TIME:** March 20, 2000  
1000 - 1130

**COMMENTS:** Standard test. Note the test stopped and started at the plant operated. Therefore, one ninety minutes were required to get a thirty minute test period.

Controlled Environments for Industry, Inc. 4981 Atlantic Blvd., Ste. 9 Jacksonville, FL 32207		PAGE 1 0 1	
FACILITY APAC Georgia Inc.		START TIME 10:00	END TIME 11:30
SOURCE Portable Concrete Plant		OBSERVATION DATE 20 Mar 2000 TIME ZONE Eastern	
ADDRESS baymeadows and 9A intersection / exchange		SEC MIN	0 15 30 45
CITY JACKSONVILLE STATE FL		SEC MIN	0 15 30 45
PHONE (864) 292-8560 SOURCE ID NO. A018-272461		1	0 0 0 0 31
PROCESS OPERATING MODE NORMAL		2	0 0 0 0 32
CONTROL EQUIP Baghouse OPERATING MODE NORMAL		3	0 0 0 0 33
DESCRIBE EMISSION POINT		4	0 0 0 0 34
HEIGHT OF EMISSION POINT		5	0 0 0 0 35
HEIGHT RELATIVE TO OBSERVER		6	0 0 0 0 36
START 85' END 85'		7	0 0 0 0 37
START 80' END 80'		8	0 0 0 0 38
DISTANCE TO EMISSIONS POINT		9	0 0 0 0 39
DIRECTION TO EM. PT.		10	0 0 0 0 40
START 150' END 150'		11	0 0 0 0 41
DIRECTION TO EM. PT.		12	0 0 0 0 42
START 338° NW END 338° NW		13	0 0 0 0 43
VERTICAL ANGLE TO OBS. PT.		14	0 0 0 0 44
START 14° END 14°		15	0 0 0 0 45
DESCRIBE EMISSIONS		16	0 0 0 0 46
START clear Ambient END Same		17	0 0 0 0 47
EMISSION COLOR		18	0 0 0 0 48
START clear END		19	0 0 0 0 49
WATER DROPLET PLUME YES (NO)		20	0 0 0 0 50
ATTACHED DETACHED		21	0 0 0 0 51
DESCRIBE PLUME BACKGROUND		22	0 0 0 0 52
START SKY END SKY		23	0 0 0 0 53
BACKGROUND COLOR		24	0 0 0 0 54
START white END white		25	0 0 0 0 55
SKY CONDITION		26	0 0 0 0 56
START Gray END Gray		27	0 0 0 0 57
WIND SPEED		28	0 0 0 0 58
START 2-6 mph END 4-10 mph		29	0 0 0 0 59
WIND DIRECTION		30	0 0 0 0 60
START 55W END 55W		COMMENTS 10:15 stopped 11:21 started 10:28 started 11:33 finished 10:31 stopped	
AMBIENT TEMPERATURE		HIGHEST OPACITY FOR HIGHEST PERIOD: 0	
START 73° END 73°		OBSERVER'S NAME (PRINT) Rick Springer	
WET BULB TEMP 69°		SIGNATURE [Signature] DATE 20 Mar 2000	
%RH 81		ORGANIZATION TECHNICAL SERVICES, INC.	
SOURCE LAYOUT SKETCH		Certified by ETA Dec 99	

# Process Weight Certification

Test Date 20 Mar 00 Sampling Time From 10:00 To 10:30

### Statement Of Process Weight:

Company Name APAC- Georgia, Inc.  
Mailing Address PO Box 127 ~~GA~~, ~~SC~~ Greenville, SC 29602  
Source Identification NA  
Source Location Bay Meadows and 9A, Jacksonville

### Data On Operating Cycle Time:

Start Of Operation, Time 10:00 AM  
End Of Operation, Time 11:30 AM  
Elapsed Time 1 1/2 Hours  
Idle Time During Cycle 1 Hour  
Design Process Rating:  
Process Wgt Rate (Input) 270 yd<sup>3</sup>/hr Product (Output) Concrete

### Data On Actual Process Rate During Operation Cycle:

(Include Specifications on Fossil Fuels)

Material	<u>Sand + Aggregate</u>	Rate*	<u>197.0 TPH</u>
Material	<u><del>Stone</del> Fly Ash</u>	Rate*	<u>6.3 TPH</u>
Material	<u>Cement</u>	Rate*	<u>25 TPH</u>
	Total Process Weight	Rate*	<u>228 TPH</u>
Product -	<u>Concrete</u>	Rate**	

- \* For phosphate process expressed as actual tons/hour and as tons P2O5 / Hour.
- For Fossil fuel steam generators expressed as BTU/Hour heat input.
- \*\* For sulfuric acid plants expressed as 100 % H2SO4 / Hour.

I certify that the above statement is true to the best of my Knowledge and belief.

Signature: [Handwritten Signature]  
Title: EMS Director

# VISIBLE EMISSIONS EVALUATOR

This is to certify that

*Richard Springer*

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

275021

Certificate Number

Jacksonville, Florida

Location

December 8, 1989

Date of Issue

*Thomas Fore*

President

*Michael Junford*

Director of Training

