

PS Form 3811, Jan. 1979
RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
 Show to whom and date delivered..... \$
 Show to whom, date and address of delivery..... \$
 RESTRICTED DELIVERY
 Show to whom and date delivered..... \$
 RESTRICTED DELIVERY.
 Show to whom, date, and address of delivery. \$ _____
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
 Mr. John W. Seabury
 3702 Silver Star Road
 Orlando, FL 32808

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	P408530335	

 (Always obtain signature of addressee or agent)

I have received the article described above.
 SIGNATURE Addressee Authorized agent

4. *John Clemond*
 DATE OF DELIVERY: *7-28-83* POSTMARK: _____

5. ADDRESS (Complete only if requested)
Q

6. UNABLE TO DELIVER BECAUSE: _____ CLERK'S INITIALS: _____

☆GPO : 1979-300-459

P 408 530 335
RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to John W. Seabury	
Street and No. 3702 Silver Star Rd.	
P.O., State and ZIP Code Orlando FL 32808	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date <i>7/26/83</i>	

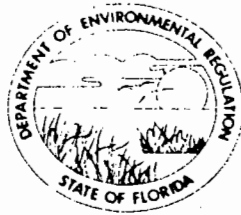
PS Form 3800, Feb. 1982

*Transferred to
Jacksonville
8/9/83*

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

July 26, 1983

Mr. John W. Seabury, P.E.
Seabury-Bottorf Associates, Inc.
3702 Silver Star Road
Orlando, Florida 32808

Dear Mr. Seabury:

We acknowledge receipt of your July 11, 1983 letter revising the application for permit to construct a soil cement plant for Martin Paving Company. We understand the plant will be built near Flagler Beach instead of Daytona Beach.

As soon as you complete the application by furnishing the maps and site plan showing the proposed plant location in Flagler County, we will resume processing the application.

Sincerely,

Willard Hanks

cc: NE District
St. Johns River District



SEABURY-BOTTORF ASSOCIATES, INC.

CONSULTING ENGINEERS

ANALYTICAL LABORATORY

3702 SILVER STAR RD. ORLANDO, FLORIDA, 32808 305-298-0846

July 11, 1983

Project No. 228-7

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Mr. Willard Hanks
Bureau of Air Quality Management
Florida Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Rd.
Tallahassee, Florida 32301-8241

DER
JUL 14 1983
BAQM

Subject: Martin Paving Co.
Construction Permit for
Proposed Soil Cement Plant

Dear Mr. Hanks:

This is to confirm and summarize our telephone discussion of the most recent turn of events in regard to the application for permit to construct a soil cement plant by Martin Paving Co. of Daytona Beach, Florida.

We have been informed by Mr. Martin that his Company has been awarded sufficient work by the ITT Palm Coast Development to justify reassignment of this plant to the Flagler Beach vicinity.

Accordingly, it is his intention to move all components of this portable facility to that area for assembly and operation as soon as proper Florida Department of Environmental Regulation can be obtained.

Thank you for bringing the special provisions of 17-2.500(3) (Relocatable Facilities) to our attention.

Please consider this letter as a request to modify the Application to apply to the new location. Maps, site plan, and full description will follow as soon as we can obtain information on these details.

Very truly yours,

John W. Seabury, P. E.

JWS/ac

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cc: Mr. Robert Martin
St. Johns River District, FDER-Orlando
Northeast District, FDER-Jacksonville



SEABURY-BOTTORF ASSOCIATES, INC.

CONSULTING ENGINEERS

ANALYTICAL LABORATORY

3702 SILVER STAR RD. ORLANDO, FLORIDA, 32808 305-298-0846

June 27, 1983

Project No. 228-7

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C. H. Fancy, P. E., Deputy Chief
Bureau of Air Quality Management
Florida Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Rd.
Tallahassee, Florida 32301-8241

DER
JUN 29 1983
BAQM

Dear Mr. Fancy:

This is in response to your letter of May 25, 1983, re information needed to complete application for construction of cement silo by Martin Paving Co. of Daytona Beach, and is submitted on behalf of Martin Paving Co.

To facilitate relation of answers to questions, answers are numbered in same order as questions.

1. Control equipment which will be used to minimize emissions when cement is removed from silo consists of tubes, covers, and shrouds employed in the following manner:
 - a. Cement will drop from silo directly through a short tube into a covered screw conveyor.
 - b. Cement will drop from covered screw conveyor through a canvas shroud onto a troughed conveyor belt.
 - c. Cement will drop from troughed belt into pug mill (paddle type) mixer where contact with water and damp sand will destroy chance of subsequent air emission.

Operating practices as normally followed by the Martin Paving Co. will allow the above mentioned equipment to be used for its intended purpose without creation of significant fugitive emissions.

2. Provision for control of fugitive emission from accidental spill during loading or unloading consist of prompt shovel and broom cleanup of the spilled material.

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DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP CENTRAL AIR PERMITTING		ACTION NO.	
		ACTION DUE DATE	
1. TO: (NAME, OFFICE, LOCATION)		INITIAL	
ADAMS	AMODIO	FANCY	GEORGE
		DATE	
2.		INITIAL	
HANKS	HERON		HOLLADAY KING
		DATE	
3.		INITIAL	
MITCHELL, Becky			MITCHELL, Bruce
		DATE	
4.		INITIAL	
PALAGYI			POWELL ROGERS SVEC THOMAS
		DATE	
REMARKS: <i>Return to me for filing</i>		INFORMATION	
		REVIEW & RETURN	
		REVIEW & FILE	
		INITIAL & FORWARD	
		DISPOSITION	
		REVIEW & RESPOND	
		PREPARE RESPONSE	
		FOR MY SIGNATURE	
		FOR YOUR SIGNATURE	
		LET'S DISCUSS	
		SET UP MEETING	
		INVESTIGATE & REPT	
		INITIAL & FORWARD	
		DISTRIBUTE	
		CONCURRENCE	
FOR PROCESSING			
INITIAL & RETURN			
FROM: <i>Patley</i>		DATE: <i>9/29</i>	
		FORM 118	

June 27, 1983

3. Excepting only the screw conveyor, belt conveyor, and pug mill mixer which are presently omitted from Application but will be used only in conjunction with the silo as described in Item 1 above: The cement is not to be used in any equipment requiring Permit from the Department.

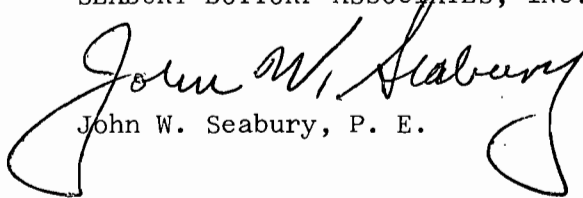
If it would be your counsel that Application should be amended to include this auxiliary apparatus after consideration of its use and relationship to the silo, as described herein; please consider this letter as a request to so include.

4. Cement from the silo will not be used in any existing permitted equipment and will not increase allowable emissions from any existing permitted equipment.

In regard to the issue of the relationship of equipment outlined in this Application and nearby existing permitted equipment, may we invite your attention to the fact that this equipment will use Portland Cement in the production of so-called "soil cement"; whereas the nearby permitted equipment uses liquid asphalt to make asphaltic concrete by a dissimilar and independent process.

Very truly yours,

SEABURY-BOTTORF ASSOCIATES, INC.



John W. Seabury, P. E.

JWS/ac

cc: Mr. Robert D. Martin

St. Johns River District, FDER-Orlando

No. **0157015**
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED—
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

SENT TO		Mr. Robert Martin	
STREET AND NO.			
P.O., STATE AND ZIP CODE			
POSTAGE		\$	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE		\$
	SPECIAL DELIVERY		¢
	RESTRICTED DELIVERY		¢
	RETURN RECEIPT SERVICE		¢
	SHOW TO WHOM AND DATE DELIVERED		¢
	SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢
	SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢
	SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢
TOTAL POSTAGE AND FEES		\$	
POSTMARK OR DATE			
5/25/83			

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1978

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

● SENDER: Complete items 1, 2, and 3.
 Add your address in the "RETURN TO" space on reverse.

1. The following services requested (check one.)
 Show to whom and date delivered.....¢
 Show to whom, date, and address of delivery.....¢
 RESTRICTED DELIVERY
 Show to whom and date delivered.....¢
 RESTRICTED DELIVERY.
 Show to whom, date, and address of delivery.\$ ____

(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
 Mr. Robert D. Martin
 P. O. Box 1909
 Daytona Beach, FL 32015

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0157015	

 (Always obtain signature of addressee or agent)

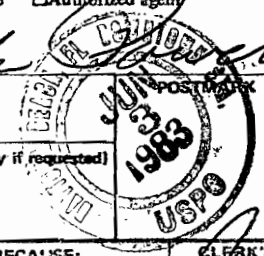
I have received the article described above
 SIGNATURE Addressee Authorized agent

4. DATE OF DELIVERY

5. ADDRESS (Complete only if requested)

6. UNABLE TO DELIVER BECAUSE:

CLERK'S INITIALS



STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

May 25, 1983

Mr. Robert D. Martin, President
Martin Paving Company
P. O. Box 1909
Daytona Beach, Florida 32015

Dear Mr. Martin:

The Bureau of Air Quality Management has reviewed the application for permit to construct a cement silo at your plant located near Daytona Beach. Additional information is needed before the department can process this application. The information needed to complete this application is listed below.

1. What control equipment and operating practice will be used to minimize emissions when the cement is removed from the silo?
2. What provisions will be made to control fugitive dust caused by any spill during loading and unloading of the silo?
3. Will the cement from this silo be used in any process equipment that does not presently have a permit to operate from the department? If so, the application needs to be amended to include this equipment.
4. Will the cement from the new silo be used in existing permitted equipment? If so, will the emissions from the existing equipment increase above the allowable values?

If you have any questions on the information being requested, please call Willard Hanks at (904)488-1344. The department will resume processing your application as soon as we receive the information requested above.

Sincerely,

C. H. Fancy, P. E.
Deputy Chief
Bureau of Air Quality
Management

CHF/ks

cc: St. Johns River District
Seabury-Bottorf Associates, Inc.

DER

MAY 09 1983

BAQM

DER PERMIT APPLICATION TRACKING SYSTEM MASTER RECORD

FILE#000000069221 COE#
FILE NAME:MARTIN PAVING COMPANY
APPL NAME:MARTIN ASPHALT
ADDR:P. O. BOX 1963
AGNT NAME:SEABURY-BOTTORF ASSOC
ADDR:3702 SILVER STAR ROAD

DER PROCESSOR:CLAIR FANCY
DATE FIRST REC: 05/02/83
APPL PHONE:(904)764-8383
CITY:DAYTONA BEACH
AGNT PHONE:(305)298-0846
CITY:ORLANDO

DER OFFICE:TLH
APPLICATION TYPE:AC
PROJECT COUNTY:64
ST:FLZIP:32015
ST:FLZIP:32808

ADDITIONAL INFO REC: / / / / / / / / / / / / / / / /
APPL COMPLETE DATE: / / / / / / / / / / / / / / / /
LETTER OF INTENT NEC:Y DATE WHEN INTENT ISSUED: / / / / / / / / / / / / / / / /
REC: / / / / / / / / / / / / / / / /
DATE REC: / / / / / / / / / / / / / / / /
COMMENTS NEC:Y DATE REC: / / / / / / / / / / / / / / / /
WAIVER DATE: / / / / / / / / / / / / / / / /

HEARING REQUEST DATES: / / / / / / / / / / / / / / / /
HEARING WITHDRAWN/DENIED/ORDER -- DATES: / / / / / / / / / / / / / / / /
HEARING ORDER OR FINAL ACTION DUE DATE: / / / / / / / / / / / / / / / /
*** RECORD HAS BEEN SUCCESSFULLY UPDATED *** 05/05/83 07:50:25
FEE PD DATE#1: / / / \$ RECEIPT# REFUND DATE: / / / REFUND \$
FEE PD DATE#2: / / / \$ RECEIPT# REFUND DATE: / / / REFUND \$
APPL:ACTIVE/INACTIVE/DENIED/WITHDRAWN/TRANSFERRED/EXEMPT/ISSUED:TR DATE:05/02/83
REMARKS:ORLANDO, PER CHUCK COLLINS:

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

Nº 33669

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Martin Asphalt Co. Date May 9, 1983
Address P.O. Box 1963 Daytona Beach, FL Dollars \$ 100.00
32015
Applicant Name & Address Same as above.
Source of Revenue _____
Revenue Code 0101 Application Number AC64-69221
By Patricia A. Idame



6245

P.O. BOX 1963 DAYTONA BEACH, FLA. 32015

May 2, 19 83 ⁶³⁻⁵³⁰/₆₃₁ 21

PAY TO THE ORDER OF Florida Department of Environmental Regulation \$ 100.00

One Hundred and no/100 ----- DOLLARS



Sun Bank of Volusia County
Holly Hill Office 21
Holly Hill, Florida 32017

MARTIN ASPHALT COMPANY

PK Martin

FOR _____

HARLAND-2

PHONE (904) 761-8383

LETTER OF TRANSMITTAL

TO St. Johns River District
Florida Dept. of Environmental Regulation
3319 Maguire Blvd., Suite 232
Orlando, FL 32803

DATE May 2, 1983	JOB NO.
ATTENTION	
RE: APPLICATION TO CONSTRUCT AIR POLLUTION SOURCES (Cement Silo)	



WE ARE SENDING YOU Attached Under separate cover the following items:

- Shop drawings Prints Plans Samples Specifications
 Copy of letter Change order _____

COPIES	DATE	NO.	DESCRIPTION
4	4/30/83		Executed Applications
1	5/02/83		\$100 Check

THESE ARE TRANSMITTED as checked below:

- For approval Approved as submitted Resubmit _____ copies for approval
 For your use Approved as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____ 19 _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS

Gentlemen:

Enclosed please find the above captioned items as requested.

COPY TO Seabury-Bottorf Assoc. (w/ opy)

SIGNED:

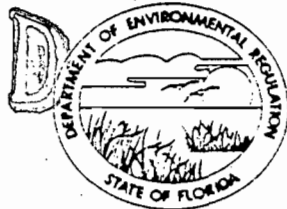
Robert D. Martin
Robert D. Martin, President

AC 64-69221

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2630 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

100
MAY 02 1983



BOB GRAHAM
GOVERNOR
TORIA J. TSCHINKEL
SECRETARY

SAINT JOHNS
RIVER DISTRICT
APPLICATION TO ~~CONSTRUCT~~ CONSTRUCT AIR POLLUTION CONTROL

SOURCE TYPE: Cement Silo [] New¹ [] Existing

APPLICATION TYPE: [] Construction [] Operation [] Modification

COMPANY NAME: Martin Paving Co. COUNTY: Volusia

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Cement Silo w/Baghouse

SOURCE LOCATION: Street Off Clyde Morris Blvd. City W. of S. Daytona

UTM: East 17-496675 North 3224270

Latitude 29 ° 9 ' 9 "N Longitude 81 ° 58 ' 30 "W

APPLICANT NAME AND TITLE: Robert D. Martin

APPLICANT ADDRESS: P. O. Box 1909, 1617 S. Nova Road, Daytona Beach, Florida 32015

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Martin Paving Co.

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: *Robert D. Martin*
Robert D. Martin, President
Name and Title (Please Type)

Date: 4/30/83 Telephone No. 904/761-8383

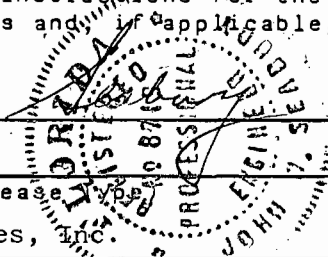
B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been ~~designed~~ examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

¹ See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed John W. Seabury
John W. Seabury
Name (Please Type)
Seabury-Bottorf Associates, Inc.
Company Name (Please Type)
3702 Silver Star Rd., Orlando, Florida 32808
Mailing Address (Please Type)



Florida Registration No. 8719 Date: April 27, 1983 Telephone No. 305/298-0846

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Construction of a bulk silo for portland cement. Silo to be supplied with cement from pneumatically unloaded "tank trucks". A baghouse effectively filters the air venting from silo during unloading, resulting in compliance.

B. Schedule of project covered in this application (Construction Permit Application Only)
Start of Construction Upon issue of permit Completion of Construction 30 days after start

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

Cost of baghouse \$1,490.00

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

None

E. Requested permitted equipment operating time: hrs/day 3 ; days/wk 5 ; wks/yr 50 ;
if power plant, hrs/yr _____; if seasonal, describe: Operation is not seasonal but
varies according to requirements of the paving trade. Above requested hours
represent independent unrelated daily, weekly, and yearly maximums.

F. If this is a new source or major modification, answer the following questions.
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? No
a. If yes, has "offset" been applied? _____
b. If yes, has "Lowest Achievable Emission Rate" been applied? _____
c. If yes, list non-attainment pollutants. _____

2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. Yes

3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. No

4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? No

5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? No

H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? No

a. If yes, for what pollutants? _____
b. If yes, in addition to the information required in this form,
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-
cation for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Portland Cement	Particulate	1 to 2	64,000	①

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 64,000

2. Product Weight (lbs/hr): 64,000

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission ¹		Allowed ² Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Particulate	2.56	0.96	17-2.650(2)	(c)11	1920	0.96	②

¹See Section V, Item 2.

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Stevens Mod. SV170	Particulate	99.8%	Unknown	AP42, 8.6-1

E. Fuels None

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average _____ Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

Cement dust shaken from bags after each period of use falls directly into storage
silos for 100% recovery.

This device does not have a conventional stack - side outlet is 8" x 8" - faces East.
 H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: Outlet ± 53 Ft. above grade ft. Stack Diameter: Outlet 8" x 8" ft.
 Gas Flow Rate: ± 700 ACFM ± 700 DSCFM Gas Exit Temperature: ambient °F.
 Water Vapor Content: nil % Velocity: 26 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume (ft) ³	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diameter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

ITEMS 1 thru 5 ARE ADDRESSED ON SUPPLEMENT PAGES 7a,b,c,d,e.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained. See Drawing No. 228-7-1
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
See Drawing No. 228-7-3
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

See Drawing No. 228-7-2

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

Yes No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

Yes No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration
Emission generated by fabric filter of 170 Sq. Ft.	
Particulate	2.56 Lbs./Hr. or less

D. Describe the existing control and treatment technology (if any).

- | | |
|---------------------------|--------------------------|
| 1. Control Device/System: | 2. Operating Principles: |
| 3. Efficiency:* | 4. Capital Costs: |

*Explain method of determining

- 5. Useful Life:
- 7. Energy:
- 9. Emissions:

- 6. Operating Costs:
- 8. Maintenance Cost:

Contaminant	Rate or Concentration

10. Stack Parameters

- a. Height: ft.
- b. Diameter: ft.
- c. Flow Rate: ACFM
- d. Temperature: °F.
- e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Cost:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

- a. Control Device:
- b. Operating Principles:
- c. Efficiency:¹
- d. Capital Costs:
- e. Useful Life:
- f. Operating Cost:
- g. Energy:²
- h. Maintenance Cost:
- i. Availability of construction materials and process chemicals:
- j. Applicability to manufacturing processes:
- k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

- 1. Control Device:
- 2. Efficiency:¹
- 3. Capital Cost:
- 4. Useful Life:
- 5. Operating Cost:
- 6. Energy:²
- 7. Maintenance Cost:
- 8. Manufacturer:
- 9. Other locations where employed on similar processes:
- a. (1) Company:
- (2) Mailing Address:
- (3) City:
- (4) State:

¹Explain method of determining efficiency.

²Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

Contaminant

Rate or Concentration

Contaminant	Rate or Concentration

(8) Process Rate:¹

10. Reason for selection and description of systems:

¹Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

- a. Was instrumentation EPA referenced or its equivalent? Yes No
- b. Was instrumentation calibrated in accordance with Department procedures?
 Yes No Unknown

B. Meteorological Data Used for Air Quality Modeling

- 1. _____ Year(s) of data from _____ / _____ / _____ to _____ / _____ / _____
month day year month day year
- 2. Surface data obtained from (location) _____
- 3. Upper air (mixing height) data obtained from (location) _____
- 4. Stability wind rose (STAR) data obtained from (location) _____

C. Computer Models Used

- 1. _____ Modified? If yes, attach description.
- 2. _____ Modified? If yes, attach description.
- 3. _____ Modified? If yes, attach description.
- 4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate
TSP	_____ grams/sec
SO ²	_____ grams/sec

E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

MARTIN PAVING CO.

SUPPLEMENT TO SECTION V, DER FORM 17-1.202(1)

SUPPLEMENTAL REQUIREMENTS:

1. Derivation of Process Input Rate:

Normal time required to unload 24 ton load is reported to be 45 minutes.

$$24 \times 2000 \div 45 = 1066.7 \text{ Lbs./Min.}$$

$$1066.7 \times 60 = 64,000 \text{ Lbs./Hr.}$$

2. Basis of Emission Estimate:

Baghouses on vents of cement silos were unknown prior to the advent of air pollution laws. Vents were simple openings and loss of cement by air exhaust was considered to be too minor to justify any expense for control devices. Losses were considered to be negligible, not more than 1 or 2% at most.

For purpose of estimating emission assume uncontrolled emission at 2% of gross weight unloaded.

$$\text{Unloading Rate} = 64,000 \text{ Lb./Hr.}$$

$$64,000 \times .02 = 1280 \text{ Lbs./Hr.}$$

$$\text{Potential Emission} = 1280 \text{ Lb./Hr.}$$

$$\text{Efficiency of cloth filter} = 99.8\%$$

From AP42, Table 8.6-1, footnote "d"

$$\text{Actual Emission} = \text{Potential} (1 - \text{efficiency})$$

$$\text{Actual Emission} = 1280 (1 - .998)$$

$$\text{Actual Emission} = 2.56 \text{ Lb./Hr.}$$

3. Basis for Potential Emission

Potential emission will amount to:

$$2.56 \text{ Lb./Hr.}$$

$$2.56 \text{ Lb./Hr.} \times 3 \text{ Hrs./Day} = 7.68 \text{ Lb./Day}$$

$$7.68 \text{ Lb./Day} \times 5 \text{ Days/Wk.} = 38.4 \text{ Lb./Wk.}$$

$$38.4 \text{ Lb./Wk.} \times 50 \text{ Wks./Yr.} = 1920 \text{ Lb./Yr.}$$

$$1920 \div 2000 = 0.96 \text{ Tons/Yr.}$$

4. Details of Control System (see Supplement pages 7c, 7d & 7e)

Stevens Mfg. Co., Tomkinsville, Ky. 42167

Model SV170

16 Bags 7" dia. x 72" (spun polyester)

170 Sq.Ft. Total

Cloth Air Ratio:

Unloading Air 350 CFM during unloading

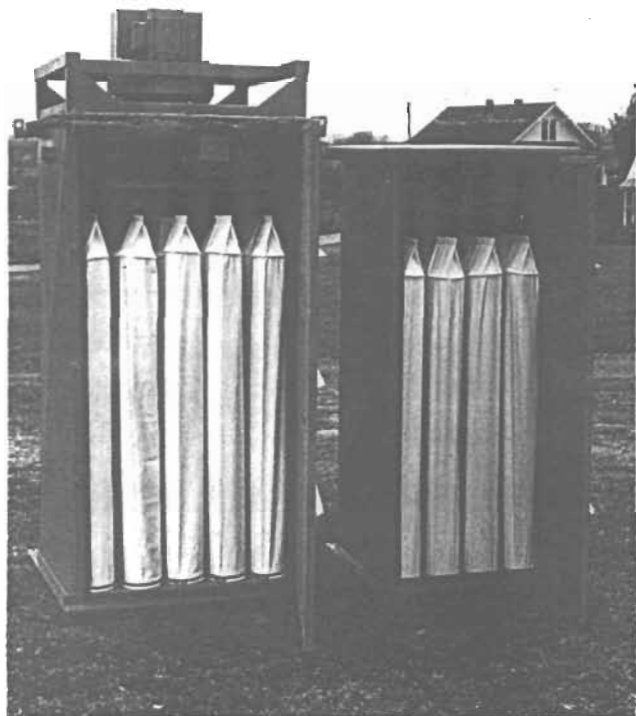
Unloading Air 700 CFM at end of load

Maximum air flow 700 CFM

$700 \div 170 = 4.12$ Cu.Ft./Sq.Ft.

5. See Item 2. above.

AIR POLLUTION EQUIPMENT



- STEPHENS FILTER VENTS PROVIDE HIGHLY EFFECTIVE DUST CONTROL FOR CEMENT AND FLYASH AS WELL AS OTHER GRANULAR MATERIALS.
 - FINE MESH FILTER BAGS OF ACS/POLYESTER SATEEN ALLOW MOVING DUST PARTICLES TO BE TRAPPED AND THE RELEASE OF CLEANSSED AIR INTO THE ATMOSPHERE.
 - THE TRAPPED MATERIAL IS THEN RETURNED TO STORAGE BY MOTORIZED BAG SHAKING ASSEMBLY. THIS SAVES YOU MONEY.
 - HOUSING IS OF HIGH QUALITY STEEL, AND DESIGNED TO PERMIT EASY MAINTENANCE.
 - THREE STANDARD MODELS AVAILABLE.
-
-

RECOMMENDED USES

- MODEL SV-170 – FOR MEDIUM TO HEAVY USAGE. READY-MIX PLANT
- MODEL SV-265 – FOR HEAVY USAGE. TWO TRUCKS UNLOADING AT ONE TIME
- MODEL SV-380 – FOR EXTRA HEAVY USAGE AND SPECIAL APPLICATION

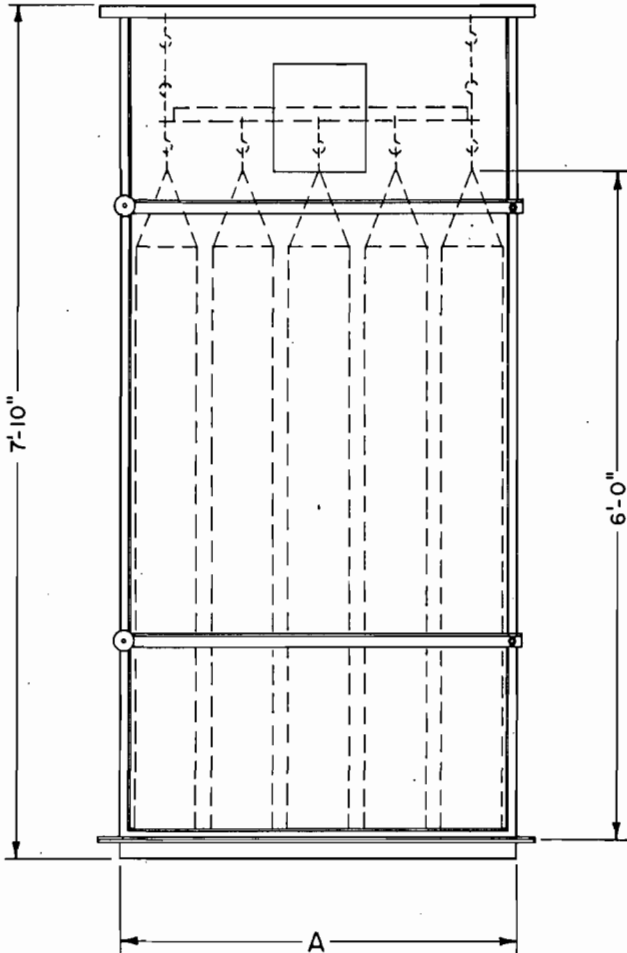
ACCESSORY EQUIPMENT

- AUTOMATIC TIMER – REGULATES TIME PERIOD FOR CLEANING OPERATION
- BLOWER – 900 CFM CAPACITY DIRECT DRIVE MOTOR 2 HP. 220 - 440 VOLTS 3-PHASE FOR SV-170 FILTER VENT
- BLOWER – 1600 CFM CAPACITY, 5 HP 220 - 460 VOLT 3-PHASE FOR SV-265 FILTER VENT

OPERATING INSTRUCTIONS

- BAGS ARE SHAKEN ONLY AFTER COMPLETE UNLOADING FOR 5 TO 6 MINUTES WITH STANDARD ¼ HP. 110 VOLT MOTOR & SHAKER ASSEMBLY.
- WHEN EQUIPPED WITH BLOWER IT IS RECOMMENDED THAT THE BLOWER BE IN OPERATION DURING COMPLETE UNLOADING. THEN BLOWER TO BE TURNED OFF AND BAGS CLEANED BY SHAKING.

FILTER VENT SPECIFICATIONS



FILTER BAG SPECIFICATIONS

FIBER: SPUN POLYESTER
CONSTRUCTION: SATEEN
WEIGHT: 9.1 OZ./SQ. YD.
AIR PERMEABILITY: 20 - 30 CFM SQ. FT.
MULLEN BURST: 620 LBS.
BREAKING: FILL: 510 LBS.
STRENGTH: WARP: 474 LBS.
TEMP. RANGE: 220°F - 270°F
RECOVERY: 99.6% - TO ONE MICRON IN SIZE

INSTALLATION INSTRUCTIONS

1. WELD ADAPTER FLANGE TO TOP OF SILO
2. CUT OUT AREA INSIDE ADAPTER FLANGE
3. LAY WEATHER STRIPPING ON INSIDE OF BOLT HOLES ON ADAPTER FLANGE
4. MOUNT FILTER VENT ON ADAPTER FLANGE AND BOLT DOWN
5. PROVIDE SWITCH AND MAKE ELECTRICAL CONNECTIONS TO ¼ HP. 110 VOLT - SINGLE PHASE MOTOR.

MODEL NO.	NO. OF BAGS	BAG SIZE	CLOTH AREA	APPROX. WEIGHT	DIM. "A"
SV-170	16	7" DIA. × 72"	170 SQ. FT.	600 LBS.	36"
SV-265	25	7" DIA. × 72"	265 SQ. FT.	750 LBS.	44"
SV-380	36	7" DIA. × 72"	380 SQ. FT.	1000 LBS.	54"

STEPHENS FILTER VENT WILL MEET ALL LOCAL, STATE, AND FEDERAL AIR POLLUTION REGULATIONS.



COTTON PRODUCTS DIVISION

The Stearns & Foster Co.

WYOMING AVE. AND WILLIAMS ST. • CINCINNATI, OHIO 45215 • 513/948-5200

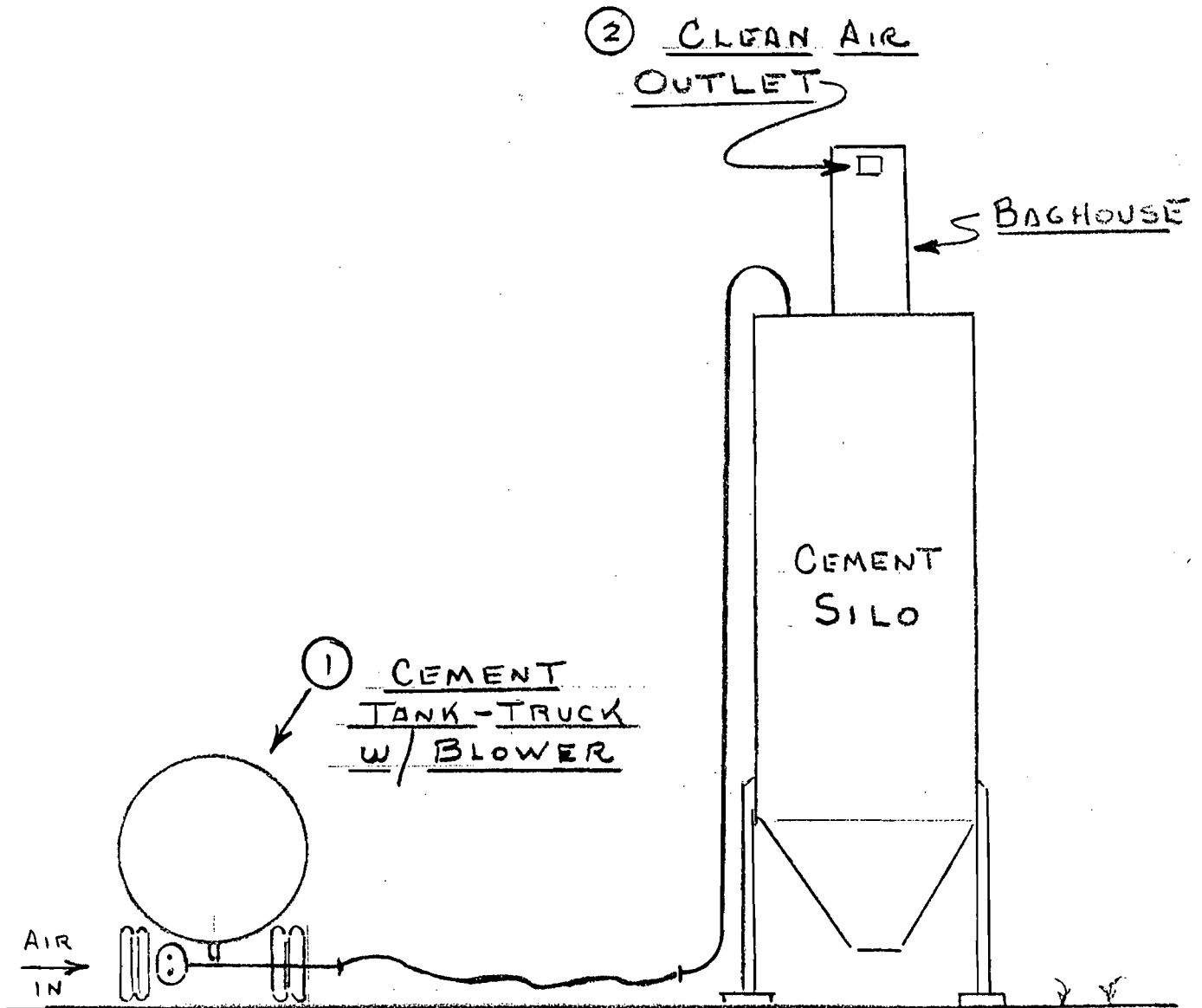
Product Data - ACS Fabric - Polyester Sateen - used
in the construction of filter bags for:

Stephens Manufacturing Co., Inc.
P. O. Box 488
Tompkinsville, KY 42167
Phone: (502) 487-6258

Fiber:	Spun Polyester
Construction: (weave)	Sateen
Weight: (normal)	9.1 oz/sq. yd.
Air Permeability:	20 - 30 CFM
Mullen Burst: (nominal)	620 lbs.
Breaking Strength: (normal)	Warp: 474 lbs.
	Fill: 510 lbs.

ACS polyester sateen fabric has similar filtering characteristics to cotton sateen but at the same time exhibits longer life which results in less bag changing. This is illustrated by:

- Greater breaking strength.
- Higher temperature capabilities:
220°F - 270°F versus cotton at 180°F.
- Greater resistance to chemical attack.
- Extremely low moisture adsorption.
- Much greater resistance to abrasion -
Taber abrasion tests have shown that polyester sateen will resist wear approximately three times as long as the similar cotton fabric (642 cycles versus 212 cycles for cotton using H-18 wheels and 1,000 gms. weight).



FLOW DIAGRAM

SEABURY-BOTTORF ASSOCIATES, INC.
CONSULTING ENGINEERS
ORLANDO, FLORIDA

MARTIN PAVING CO.
DAYTONA BEACH, FLORIDA

DES.

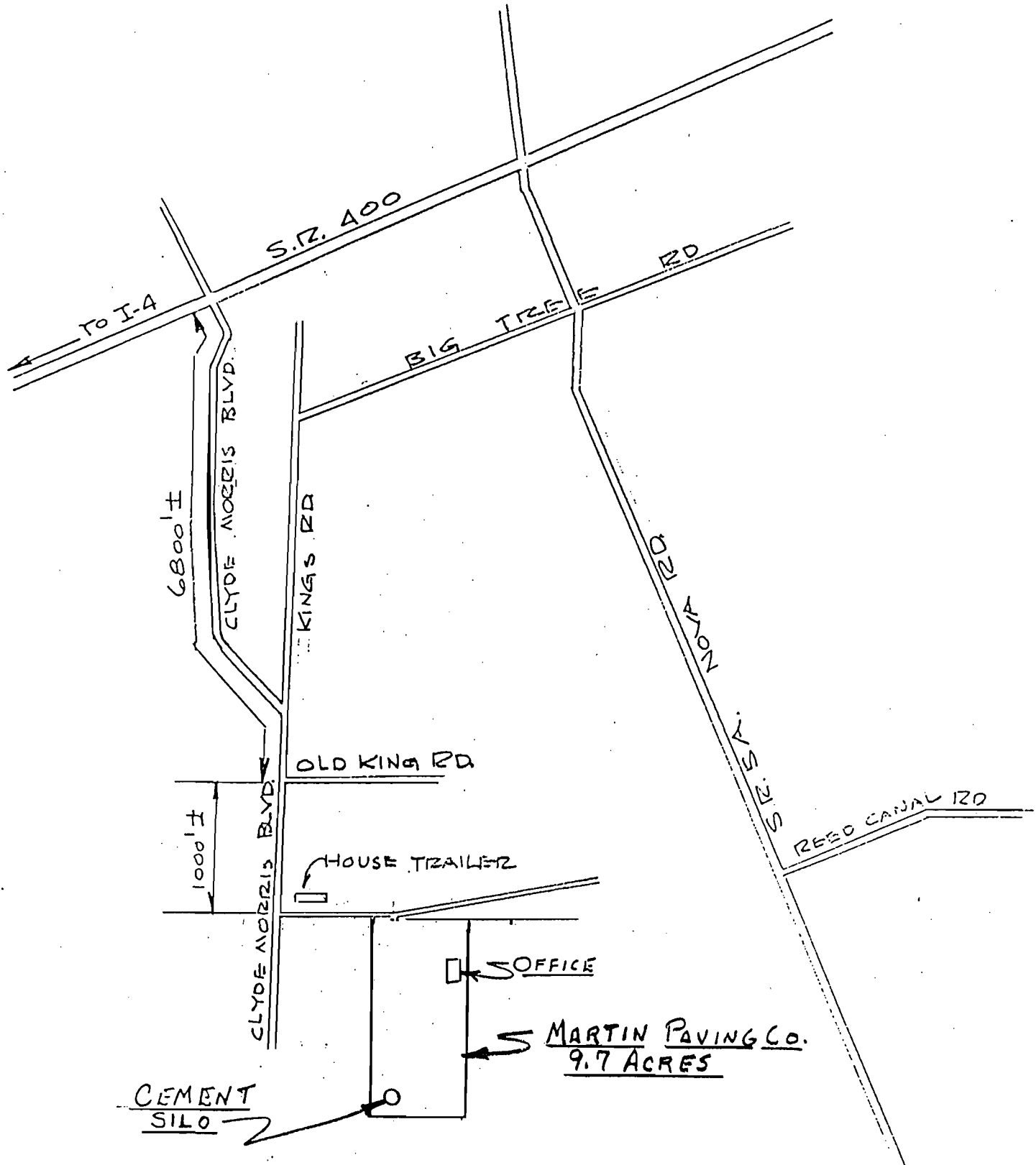
DWN. J.S.

228-7-1

SCALE NONE

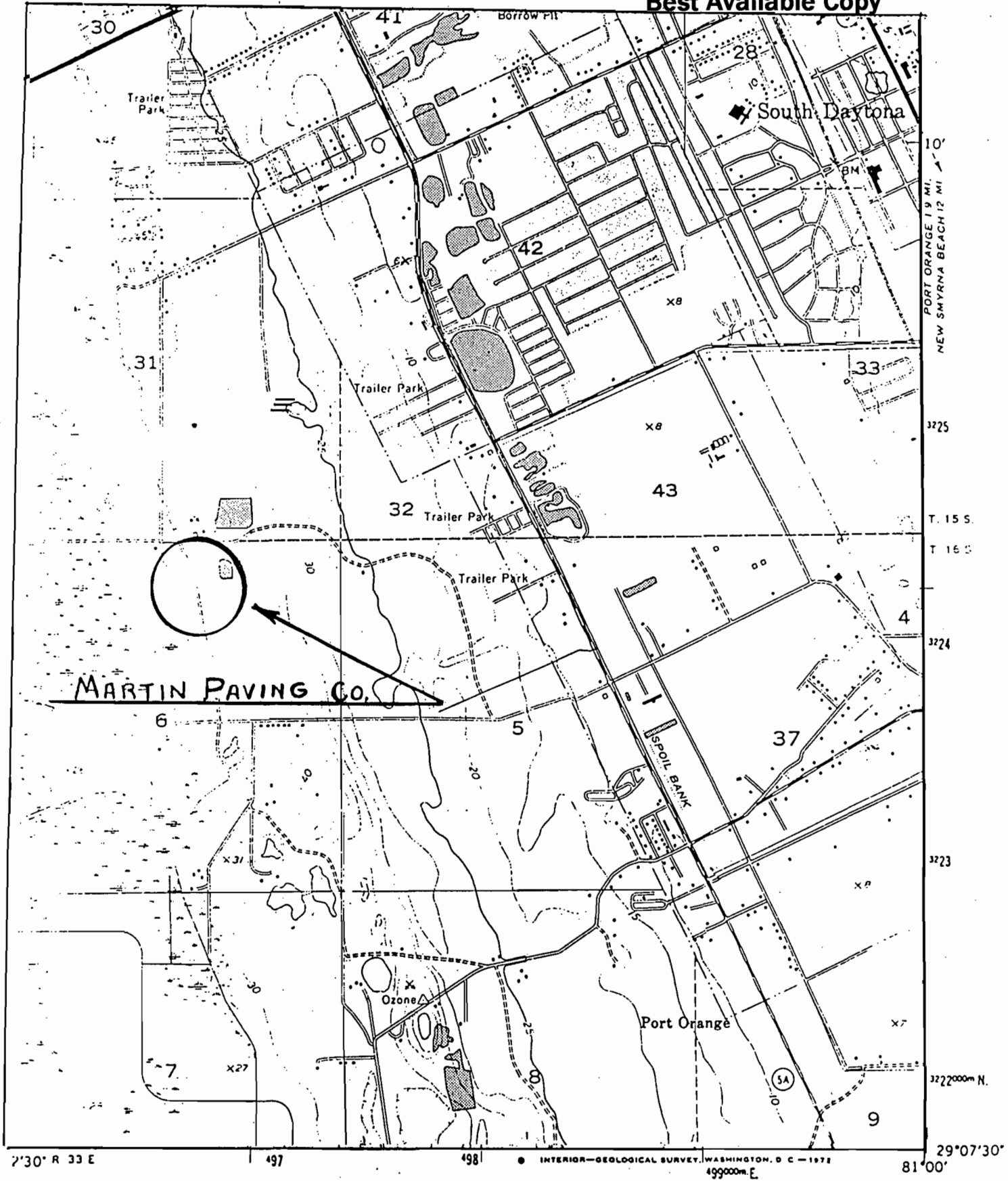
DATE 4-27-83

DRAWING NO.




PLOT PLAN
 NO SCALE

SEABURY-BOTTORF ASSOCIATES, INC. CONSULTING ENGINEERS WINTER PARK, FLORIDA		
MARTIN PAVING CO. SO. DAYTONA, FLORIDA		
DES.	DWN.	228-7-2
SCALE $\frac{1}{2}$ " = 1'	DATE 4-27-83	



MARTIN PAVING CO.

27°30' R 33 E 497 498 INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1972 499000m. E 81°00' 29°07'30"

USC&GS T-9100



QUADRANGLE LOCATION

SEABURY-BOTTORF ASSOCIATES, INC. CONSULTING ENGINEERS ORLANDO, FLORIDA		
MARTIN PAVING Co. DAYTONA BEACH, FLORIDA		
DES.	DWN.	228-7-3
SCALE	DATE 2/9/83	DRAWING NO.



SEABURY-BOTTORF ASSOCIATES, INC.

CONSULTING ENGINEERS

ANALYTICAL LABORATORY

3702 SILVER STAR RD. ORLANDO, FLORIDA, 32808 305-298-0846

April 27, 1983

Project No. 228-7

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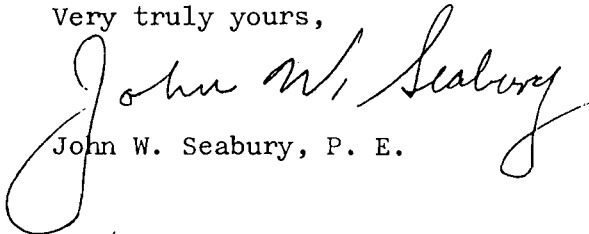
St. Johns River District
Florida Dept. of Environmental Regulation
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Subject: Operating Hours
Cement Silo Baghouse for
Pneumatic Conveyor

Gentlemen:

For purposes of establishing hours of operation in order to determine potential emissions, the Management of Martin Paving Co. has agreed to accept a reduced and enforceable limit of 750 hours of annual operation for unloading bulk cement tank trucks.

Very truly yours,



John W. Seabury, P. E.

JWS/ac

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