

J. Brown
C. Collins



ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

Certified Mail No. P-744-600-796
Return Receipt Requested

April 7, 1993

Mr. Hamilton S. Oven, Administrator
Siting Coordination Office
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: AQC Equipment Status Report

Dear Mr. Oven:

The enclosure to this letter provides an update to the status report outlining progress to date on engineering design and purchase of major air pollution control equipment for Stanton Energy Center, Unit 2. This report covers progress through March 31, 1993. The submittal of this status report is required by the Supplemental Conditions of Certification, Part II, Item II/I.D.3.

The following are considered as major pieces of air pollution control equipment:

- Steam generator
- Post Combustion NO_x Reduction System (SCR)
- Flue Gas Scrubber
- Chimney
- Fly Ash Handling System
- Dust Collection equipment

RECEIVED

APR 12 1993

D. E. R.
SITING COORDINATION



Department of Environmental Regulation
Routing and Transmittal Slip

To: (Name, Office, Location)

1. ~~John Brown~~
2. ~~BAR~~
3. ~~Russon~~
4. Pally for OUC Starter 2 file

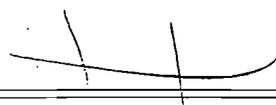
Remarks:

FVI



Smile

From:



Date

4-13-93

Phone

7-0472

Mr. Hamilton S. Oven
April 7, 1993
Page 2

Future status report submittals will be made to update progress for air pollution control equipment on a quarterly basis.

Very truly yours,



G. A. DeMuth
Director
Environmental Division

GAD:rc
gd04072
Enclosures

xc: K. P. Ksionek, w/enclosure
F. F. Haddad, w/enclosure
D. M. Spencer, w/enclosure
J. M. Bateman, w/enclosure (OCEPD)
H. E. Smith, (B&V)

[Faint handwritten notes and signatures]

[Handwritten notes:]
L. S. & E. Power Systems
Environmental Service Division
3030 Main Street, 10th Floor
Irvine, Calif. 95-712-7340

April 2, 1993

Air Pollution Control Equipment
Status Report

This status report indicates the progress to date on engineering design and purchase of major air pollution control equipment for Stanton Energy Center, Unit 2. This report covers the period through March 1993. Data regarding engineering status and fabrication status is based on information supplied and drawings submitted by the equipment suppliers. The delivery status is based on contract requirements.

EQUIPMENT: Steam Generator

CONTRACTOR: Babcock & Wilcox

BID ISSUE: Completed July 5, 1990

CONTRACT AWARD: Completed February 19, 1990

CONTRACT CHANGES: Change Order 1 to Contractor December 2, 1992
Change Order 2 to Contractor March 29, 1993

ENGINEERING STATUS: 96 Percent Complete and On Schedule

FABRICATION STATUS: Started in December 1992, continuing through December 1994

DELIVERY STATUS: Due June 1994 through December 1994

SIGNIFICANT COMMENTS: The equipment replicates the SEC-1 equipment, except for specific changes made for SEC-2 including low - NO_x burners and over-fire air ducts. These and other miscellaneous changes account for the engineering work currently being conducted.

EQUIPMENT: Post Combustion NO_x Reduction System (SCR)

CONTRACTOR: Noell, Inc.

BID ISSUE: Completed May 20, 1992

CONTRACT AWARD: Completed August 11, 1992

CONTRACT CHANGES: None

ENGINEERING STATUS: 50 percent complete and on schedule.

FABRICATION STATUS: Due August 1993 through November 1994

DELIVERY STATUS: Due April 1994 through June 1995

SIGNIFICANT COMMENTS: Technical sections of the contract documents were issued for agency information on March 8, 1993 in compliance with Condition of Certification II/I.A.16.

EQUIPMENT: Flue Gas Particulate Removal Equipment

(Electrostatic Precipitator)

CONTRACTOR: Wheelabrator-Frye, Air Pollution Control Division

BID ISSUE: Completed August 24, 1990

CONTRACT AWARD: Completed April 16, 1991

CONTRACT CHANGES: None

ENGINEERING STATUS: 94 Percent Complete and On Schedule

FABRICATION STATUS: Due August 1993 through January 1995

DELIVERY STATUS: Due April 1994 through June 1995

SIGNIFICANT COMMENTS: The equipment replicates the SEC-1 equipment with insignificant change in design.

EQUIPMENT: Flue Gas Scrubber

CONTRACTOR: ABB Environmental Systems

BID ISSUE: Completed October 8, 1990

CONTRACT AWARD: Completed April 16, 1991

CONTRACT CHANGES: Change Order 1 to Contractor August 4, 1992

Change Order 2 to Contractor January 4, 1993

ENGINEERING STATUS: 96 Percent Complete and On Schedule

FABRICATION STATUS: Due August 1993 through December 1994

DELIVERY STATUS: Due March 1994 through June 1995

SIGNIFICANT COMMENTS: The equipment replicates the SEC-1 equipment except for modifications to achieve higher removal efficiency.

EQUIPMENT: Chimney

CONTRACTOR: Pullman Power Products

BID ISSUE: Completed August 10, 1990

CONTRACT AWARD: Completed March 12, 1991

CONTRACT CHANGES: Change Order 1 to Contractor January 15, 1992

Change Order 2 to Contractor January 11, 1993

ENGINEERING STATUS: 95 Percent Complete and On Schedule

ERECTION STATUS: Due April 1994 through December 1995

SIGNIFICANT COMMENTS: The equipment replicates the SEC-1 design.

EQUIPMENT: Fly Ash Handling System

CONTRACTOR: United Conveyor Corporation

BID ISSUE: Completed September 28, 1990

CONTRACT AWARD: Completed March 12, 1991

CONTRACT CHANGES: Change Order 1 to Contractor December 2, 1992

ENGINEERING STATUS: 97 Percent Complete and On Schedule

FABRICATION STATUS: Due June 1993 through May 1994

DELIVERY STATUS: Due June 1994 through August 1994

SIGNIFICANT COMMENTS: None

EQUIPMENT: Dust Collectors (Bulk Materials Handling)

CONTRACTOR: Roberts & Schaefer Company

BID ISSUE: Completed December 10, 1991

CONTRACT AWARD: Completed April 8, 1992

CONTRACT CHANGES: Change Order 1 to Contractor September 1, 1992

ENGINEERING STATUS: 95 Percent Complete and On Schedule

FABRICATION STATUS: Due August 1993 through August 1994

DELIVERY STATUS: Due September 1994

SIGNIFICANT COMMENTS: Contract change is not related to the dust collector scope of supply.



ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

Certified Mail No. P-744-600-946
Return Receipt Requested

March 8, 1993

Mr. Hamilton S. Oven, Administrator
Siting Coordination Office
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

MAR 10 1993

D. E. R.
SITING COORDINATION

Re: NOx Control Technical Data

Dear Mr. Oven:

The Supplemental Conditions of Certification for Stanton Energy Center, Unit 2 (SEC-2), require the submittal of technical data pertaining to the NOx control system. These requests are specified in Part II, Page 11, Item II/I.A.16 as conditions recommended by the Florida Department of Environmental Regulation (FDER).

We enclose with this letter, one copy of technical specifications and related performance data for the Nox Reduction System being installed at SEC-2. These documents indicate the performance, material requirements, and design considerations applicable to the scope of the project. The technology selected for accomplishing the Post Combustion Nox Control on this project is Selective Catalytic Reduction (SCR).

Under provisions of the Supplemental Conditions, the FDER may disapprove the technology chosen if the department determines that the system is inadequate to meet the Nox emissions limitations specified in the Conditions. We are confident that the SCR technology selected will provide control as required to comply with the specified limits.



Mr. H. S. Oven
March 8, 1993
Page 2

We request your response in concurrence with the selection of SCR technology, with confirmation that the disapproval allowed under Condition 16 will not be exercised. Questions on this submittal may be direct to me at 407/423-9141.

Very truly yours,



G. A. DeMuth
Director
Environmental Division

GAD:rc
gad03084
Attachment

xc: B. Beals, EPA Region IV (w/enclosures)
R. Baird, OCEPD
W. H. Herrington
T. B. Tart
K. P. Ksionek
F. F. Haddad
D. M. Spencer
H. E. Smith (B&V)
L. Keeseey (YVAVB)

PART 2 - TECHNICAL REQUIREMENTS

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Section 2A - SYSTEM DESIGN

2A.1 GENERAL. This section covers the general description, design criteria, and performance criteria for the selective catalytic NO_x reduction (SCR) system.

2A.2 CODE REQUIREMENTS. All equipment and materials furnished under these specifications shall be designed and constructed in accordance with the latest applicable requirements of the standard specifications and codes of the following organizations and other such regularly published and accepted standards except where modified or supplemented by these specifications; and in accordance with the applicable requirements of the Federal "Occupational Safety and Health Standards."

AFBMA	Anti-Friction Bearing Manufacturers Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWWA	American Water Works Association
EET	Edison Electric Institute
IEEE	Institute of Electrical and Electronics Engineers
NEMA	National Electrical Manufacturers Association
UL	Underwriters' Laboratories

2A.3 ARRANGEMENT. The NO_x Reduction System will be installed in the ductwork between the economizer outlet and the air heater. The space available for installation of the NO_x Reduction System and the approximate required arrangement of equipment is indicated on the following drawings included as part of these specifications.

	<u>Drawing No.</u>	<u>Revision</u>	<u>Title</u>
*#	16805-DM-1052	0 1	ARRANGEMENT FOR SCR PLAN AND SECTIONS
*##	16805-DM-1089	A	FLOW DIAGRAM LEGEND SHEET
	16805-DM-1053A	1	FLOW DIAGRAM - NO_x REDUCTION SYSTEM
	16805-DM-1053B	1	FLOW DIAGRAM - NO_x REDUCTION SYSTEM
	P-1045-F-003	A	PIPING AND INSTRUMENT DIAGRAM - AMMONIA STORAGE

#Addendum 1

##Addendum 2

***Contract Revision**

<u>Drawing No.</u>	<u>Revision</u>	<u>Title</u>
* P-1045-F-004	A	PIPING AND INSTRUMENT DIAGRAM - AMMONIA INJECTION SYSTEM
#		
16805.62.3401.05-20003	2	GENERAL ARRANGEMENT AIR HEATER SIDE AND PLAN VIEW
16805.62.3401.05-20007	2	GENERAL ARRANGEMENT FRONT SECTION G-C
16805.62.3401.05-20010	2	GENERAL ARRANGEMENT PLAN SECTION G-G
# 16805.62.3401.05-20024	B	ARRANGEMENT AIR HEATER

**The following drawings identify the arrangement of the equipment provided by the Contractor. In the case of conflicts between the drawings and the requirements of these specifications, the specifications shall take precedence.*

<u>Drawing No.</u>	<u>Revision</u>	<u>Title</u>
P-1045-GA-005	0	REACTOR PLAN
P-1045-GA-006	0	REACTOR SECTION AND ELEVATION

The limits of the Owner-furnished equipment and ductwork are indicated on the drawings.

The final equipment arrangement shall provide adequate space for access, cleaning, maintenance, stairwells, walkways, laydown area, access hoistways, monorails, and space for Owner-furnished equipment. The final arrangement shall be acceptable to the Engineer.

The equipment will be supported above grade on structural steel supports furnished by the Owner. The Owner-furnished structural steel will extend from grade to the support level elevation at the reactor bottom.

2A.4 SYSTEM DESCRIPTION. The NO_x Reduction System shall be designed and arranged to remove oxides of nitrogen from the flue gas as it emerges from a coal fired steam generator, prior to the gas passing through the single, trisector type, regenerative air preheater or any particulate removal system.

#Addendum 1
Addendum 2

***Contract Revision**

OUC 16805 NO_x REDUCTION SYS 62.0205
101292
2A-2

The NO_x Reduction System shall be designed to limit emissions as specified in the article entitled Flue Gas Conditions.

2A.5 OPERATING CONDITIONS. The NO_x Reduction System and auxiliary equipment shall be designed for operation under the following conditions.

2A.5.1 Steam Generator. The steam generator is a Babcock & Wilcox Company front and rear wall fired, natural circulation, convection reheat boiler designed to burn pulverized coal. The steam generator has a maximum continuous rating of 3,305,000 pounds per hour of steam at 2,640 psi, with a gross heat input of 4,130 million Btu per hour. The steam generator is a cycling unit designed for 200 starts per year.

2A.5.2 Load Range and Operating Requirements. The NO_x Reduction System and auxiliary equipment shall be suitable for automatic operation at all loads from startup to the maximum continuous rating of the steam generator.

YOUNG, VAN ASSENDERP, VARNADOE & BENTON, P. A.

ATTORNEYS AT LAW

REPLY TO:

R. BRUCE ANDERSON
RICHARD E. BENTON
TASHA O. BUFORD
DAVID L. COOK
DAVID B. ERWIN
C. LAURENCE KEESEY
MARY A. MARNELL
G. DONALD THOMSON
KENZA VAN ASSENDERP
GEORGE L. VARNADOE
ROY C. YOUNG

Tallahassee

January 27, 1993

GALLIE'S HALL
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*BOARD CERTIFIED REAL ESTATE LAWYER

RECEIVED

JAN 27 1993

Hamilton S. Oven, P.E.
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

D. E. A.
SITING OFFICE

Re: Orlando Utilities Commission's Proposed
Modification of Site Certification to
Authorize Construction of a Temporary Concrete
Batch Plant; Curtis H. Stanton Power Plant,
Unit No. 1 - PA-81-14

Dear Buck:

Pursuant to Section 403.516(1)(b), Florida Statutes, and our meeting of January 7, 1993, I am submitting the enclosed modification of site certification request on behalf of the Orlando Utilities Commission (OUC). This modification is necessary to authorize construction of a temporary concrete batch plant at the Stanton Energy Center. The batch plant will provide concrete over a period of not more than thirty-six (36) months to be used for the construction of the previously certified Stanton Unit 2 power plant. The batch plant will be disassembled and removed from the site prior to commencement of operation of Stanton Unit 2.

The subject concrete batch plant is a "relocatable facility" as defined by Rule 17-212.200(59), F.A.C. The batch plant is currently permitted by the Florida DER (see DER Permit No. A009-201033, attached to the Proposed Agreement as Exhibit C) for operation at Crystal River, Citrus County, Florida. This plant was dismantled after completion of the project at Crystal River, and awaits reconstruction at OUC's Stanton Energy Center.

The proposed batch plant will be located on a three acre site that is within the area that was cleared and prepared for the construction of Stanton Unit 1 and its associated facilities. The batch plant will not be within, and will not affect, the portion of the Stanton Energy Center site that is designated for management of the red-cockaded woodpecker population.

Hamilton S. Oven, P.E.
Page 2
January 27, 1993

The attached modification request consists of a Proposed Agreement for Modification of Site Certification with the following attached exhibits:

- Exhibit A: an application to operate/construct an air pollution source;
- Exhibit B: a narrative description of the temporary batch plant operation; and
- Exhibit C: current DER permit and application dated April 4, 1991, filed by Florida Mining and Materials for the site at Crystal River.

The submission of this package is in accordance with the provisions of Rules 17-17.211 and 17-4.210, Florida Administrative Code.

Six copies of the modification request are being submitted to your office for the Department's use and review. This modification request is also being submitted simultaneously by me to all parties to the original Stanton Energy Center site certification proceeding and to any additional parties involved in the supplemental certification for Stanton Unit 2.

As we discussed with you and other DER representatives on January 7, 1993, OUC is requesting this modification pursuant to Section 403.516(1)(b), Florida Statutes. This statutory provision authorizes DER to modify the Stanton Energy Center site certification provided no original party objects within forty-five (45) days from their receipt of this proposed modification and provided that no member of the public with legal standing objects within thirty (30) days from the date DER provides public notice by publication in the Florida Administrative Weekly of this proposed modification of certification.

OUC requests that DER provide public notice of this request for modification of site certification pursuant to Rule 17-17.151(10), Florida Administrative Code. That notice will commence the period for public comment.

In accordance with Rule 17-17.293(1)(c), Florida Administrative Code, OUC's check for \$10,000, payable to DER, is enclosed. Those funds will reimburse DER and agency parties for expenses incurred in reviewing this modification.

Hamilton S. Oven, P.E.
Page 3
January 27, 1993

OUC is available to discuss any questions which may arise during the review process.

Sincerely,


C. Laurence Keesey

CLK/kdh
Enclosure
cc: Parties to Original and
Supplemental Certification

I:\users\kdh\oven.clk

1/27/93

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED

JAN 27 1993

IN RE:)
)
ORLANDO UTILITIES COMMISSION)
CURTIS H. STANTON POWER PLANT,)
UNIT NO. 1, SITE CERTIFICATION)
_____)

DER CASE NO. PA81-14

COOPERATION

PROPOSED AGREEMENT FOR MODIFICATION
OF SITE CERTIFICATION TO AUTHORIZE
CONSTRUCTION OF A TEMPORARY CONCRETE BATCH PLANT

Orlando Utilities Commission (OUC) hereby requests the concurrence of the Florida Department of Environmental Regulation (DER) and all interested parties to a modification of the site certification for the Curtis H. Stanton Power Plant, Unit 1, pursuant to Section 403.516(1)(b), Florida Statutes, and Rule 17-17.211, Florida Administrative Code. Those provisions authorize the Department of Environmental Regulation (DER) to modify the certification after notice is provided to both the original parties and the public, provided no original party or member of the public, whose interests will be substantially affected, objects within the applicable time period. In addition, OUC requests that DER approve the submitted application for a permit to operate/construct an air pollution source. In support of this modification, OUC states:

1. The Curtis H. Stanton Energy Center (hereinafter Stanton) is a 3,280-acre site, with associated railroad, utility and transmission corridors located in Orange County. On December 14, 1982, OUC was issued a final Site Certification Order by the Siting Board, pursuant to Chapter 403, Part II, Florida Statutes, for the

location, construction, and operation of the Stanton Unit 1.

2. Unit 1, a 465 megawatt gross, 440 megawatt net, coal-fired electrical generating plant commenced commercial operation on July 1, 1987. The certified facilities associated with the Stanton site include a railroad corridor containing a spur for coal train access, a cooling water pipeline for the treated sewage effluent used for cooling water obtained from the Orange County Easterly Subregional Waste Water Treatment Plant, a plant access road and associated transmission lines. The Stanton Energy Center site and some of its associated facilities were sized and certified to accommodate the generation on site of up to 2,000 megawatts of electric power.

3. On December 17, 1991, the Siting Board issued a final order approving the supplemental certification for the construction of Stanton Unit 2. Like Unit 1, Unit 2 is a 465 megawatt gross, 440 megawatt net, coal-fueled, steam electric generating plant. Unit 2 is intended by OUC to be virtually identical to existing Unit 1.

4. Completed site clearing and site preparation for Stanton Units 1 and 2 and their associated facilities directly affected approximately 960 acres of the total 3,280 acre Stanton Energy Center. The construction of the Stanton Unit 2 power block will affect approximately nine acres within this 960 acre area, which were originally graded and prepared during Unit 1 construction.

5. Subsequent to the issuance of the supplemental certification for Stanton Unit 2, OUC has identified the need for

modification to the certified site to authorize the temporary use of a concrete batch plant during the construction phase of Unit 2. The purpose of the concrete batch plant is to provide concrete for the construction of Unit 2's pilings, foundation, and cooling towers, and is anticipated to be in operation for approximately thirty-six (36) months.

6. The batch plant is designed and manufactured by the Vince Hagan Company and is deemed to be a "relocatable facility" as defined by Rule 17-212.200(59), Florida Administrative Code. The batch plant was previously permitted by the Florida DER (DER Permit #A009-201033) and operated at Crystal River, Citrus County, Florida. Copies of the current DER permit and application dated April 4, 1991, filed by Florida Mining and Materials are attached as Exhibit C. The plant was dismantled and awaits reconstruction on less than three acres of the previously cleared and prepared 960 acre site at OUC's Stanton Energy Center.

7. The use of an on-site temporary concrete batch plant will save time and money in the production and transport of concrete to construct Unit 2. An on-site batch plant will reduce by approximately 85% the amount of heavy truck traffic that would otherwise originate off-site and will also reduce air emissions and other potential environmental impacts. An on-site facility eliminates the need for thousands of vehicular trips, each of which would require an approximate twenty-mile round trip to the nearest existing concrete production facility.

8. Construction and operation of the proposed concrete batch

plant will not result in any wastewater discharge from the Stanton site. The wastewater from the batch plant will be routed to the existing coal pile runoff pond, a pond lined with six inches of bentonite clay having a permeability of 1×10^{-7} cm/sec. Monitoring programs are in place to monitor ground water quality to timely detect potential degradation of water quality. These programs will monitor ground water quality during the 36 month period when the batch plant will be in operation.

9. Water use for mixing the concrete will be approximately 8,000 gallons per day, well under the amount of permitted extraction for Stanton Units 1 and 2. Water use for concrete mixing will end before ground water withdrawals for commercial operation of Stanton Unit 2 commence.

10. The use of the temporary concrete batch plant should not have any significant adverse impact on existing plant or animal life, nor should it impact on the red-cockaded woodpeckers or their habitat on the Stanton site. As previously mentioned, no additional land need be cleared for the use of this temporary facility. The site of the concrete batch plant is not within the portion of the Stanton Energy Center site that is a red-cockaded woodpecker management area.

11. Minor air quality impacts will result from the operation of this temporary batch plant. However, the air emissions, as described in the attached permit application, DER Form 17-1.2.02(1), are minor in nature and plant operation will be well within the existing guidelines. The operation of the temporary

concrete batch facility will precede, and in no way add to, the approved emissions of the Stanton Unit 2. Use of the batch plant will be discontinued prior to the operation of Unit 2. Pursuant to Rule 17-4.210, Florida Administrative Code, an application to operate/construct an air pollution source is attached as Exhibit A to this modification request which describes in detail the batch plant and its emissions. Attached as Exhibit B is a narrative description of the temporary concrete batch plant operation.

12. The requested modification of certification and the activities to be undertaken will be done in compliance with the existing conditions of certification.

REQUEST FOR RELIEF

Accordingly, OUC requests the following:

1. That all parties to the original certification proceeding agree to, or otherwise do not object to, this proposed modification within forty-five (45) days of the submittal of this proposed agreement as provided for in Section 403.516(1)(b), Florida Statutes.

2. That upon no objection being raised by the parties as provided above, or by a substantially affected person within thirty (30) days of public notice of this proposed modification, the Department of Environmental Regulation issue an order modifying the site certification pursuant to Section 403.516(1)(b), Florida Statutes.

3. That the Department of Environmental Regulation approve

the submitted application to construct/operate an air pollution source.

4. That the Department of Environmental Regulation enter its order modifying the certification of Stanton Unit 1 as requested herein and grant OUC such other relief as may be appropriate.

Respectfully submitted this 27TH day of January, 1993.

Thomas B. Tart

THOMAS B. TART
Florida Bar I.D. # 113120
General Counsel
Orlando Utilities Commission
500 S. Orange Avenue
Second Floor
Orlando, FL 32801
407/423-9123

Laurence Keeseey

C. LAURENCE KEESEY
Florida Bar I.D. # 0174225
H. KENZA VAN ASSENDERP
Florida Bar I.D. # 158829
Young, van Assenderp, Varnadoe
& Benton, P.A.
Post Office Box 1833
Tallahassee, Florida 32302
904/222-7206

Attorneys for
Orlando Utilities Commission

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Proposed Agreement for Modification of Site Certification to Authorize Construction of a Temporary Concrete Batch Plant has been furnished by Certified U. S. Mail, Return Receipt Requested, to the following parties of record this 27th day of January, 1993:

John Gehrig, Esq.
Orange County Attorney
201 S. Rosalind Ave.
6th Floor
Orlando, FL 32801

Toni M. Leidy
South Florida Water
Management District
3301 Gun Club Road
Post Office Box 24680
W. Palm Beach, FL 33416-4680

Fred Bryant, Esq.
306 East College Avenue
Tallahassee, FL 32302

M. Robert Christ
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Florida Public Service Comm.
101 E. Gaines Street
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Room 226
Tallahassee, FL 32399-0863

Kathryn Mennella, Esq.
Sr. Asst. General Counsel
St. Johns River Water Mgmt. Dist.
Post Office Box 1429
Palatka, FL 32178-1429

Hamilton S. Oven, P.E.
Siting Coordination Office
Div. of Air Resources Mgmt.
Dept. of Environmental Reg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Ken Plante, Esq.
General Counsel
Fla. Dept. of Natural Resources
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

Charles Lee, Senior Vice Pres.
Patrick Kennedy, Legal Intern
Florida Audubon Society
460 Highway 435, Ste. 200
Casselberry, FL 32707

Cliff Guillet
East Central Florida
Regional Planning Council
1011 Wymore Road
Suite 105
Winter Park, Florida 32789

William H. Roberts
Assistant General Counsel
Dept. of Transportation
605 Suwannee Street
MS-58
Tallahassee, FL 32399-0458

Florida Game & Fresh Water
Fish Commission
Jim Antista, General Counsel
Farris Bryant Building
Room 108
620 S. Meridian Street
Tallahassee, FL 32399-1600

Gray, Harris & Robinson, P.A.
James F. Page, Jr., Esquire
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Suite 1200
201 East Pine Street
Orlando, Florida 32802-3068

Florida Department of
Environmental Regulation
Richard T. Donelan
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Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

U.S. Environmental Protection
Agency
Region IV
John Barker, Regional Counsel
Philip Mancusi-Ungaro
Assistant Regional Counsel
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Robert E. Hendry, Esquire
Hendry & Stoner, P.A.
215 East Central Boulevard
Orlando, Florida 32801

Florida Chapter of the
Sierra Club
Irby G. Pugh, Esquire
218 Annie Street
Orlando, FL 32806

Robert L. Taylor, Esq.
Suite 1120, Hartford Building
200 East Robinson Street
Orlando, FL 32801

Laura S. Leve
Assistant General Counsel
2601 Blairstone Road
Tallahassee, FL 32399-2500

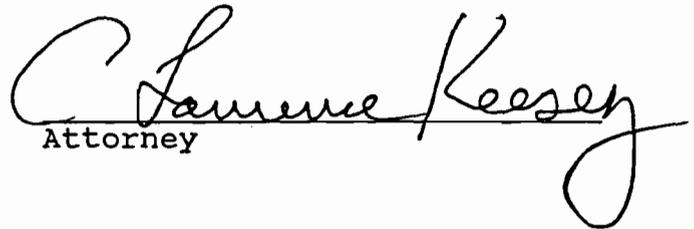

Attorney

EXHIBIT A

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Temporary Concrete Batch Plant New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: Florida Mining and Materials COUNTY: Orange

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 and Flyash

SOURCE LOCATION: Street 5100 S. Alafaya Trail City Orlando

UTM: East 481716 North 3151408

Latitude 28 ° 07 ' 30 "N Longitude 81 ° 10 ' 38 "W

APPLICANT NAME AND TITLE: _____

APPLICANT ADDRESS: P.O. Box 31965 Tampa, FL 33631-3965

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Florida Mining & Materials

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: _____

A.F. Diecidue, Director District Management
Name and Title (Please Type)

Date: 1/15/93 Telephone No. 813-933-6711

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 William M. Steves

William M. Steves, P.E.

Name (Please Type)

DSA Group, Inc.

Company Name (Please Type)

2005 Pan Am Circle Tampa, FL 33607

Mailing Address (Please Type)

Florida Registration No. 18309 Date: 1/14/93 Telephone No. 813-873-1222

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.

The project's equipment will consist of a Vince Hagan Mobile Batch Plant to be used for the preparation of concrete. A cement and flyash silos with Hagan Model ES-268B baghouses will be used on each silo to control particulate emissions. These control methods will insure that this temporary facility will be in full compliance. Because of the small size of the site and operation any fugitive dust will be controlled with sprinkling as needed. This is a temporary facility to be used during the construction of a cooling tower. It is anticipated that this facility will be in operation for approximately 36 months.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction March 1, 1993 Completion of Construction April 1, 1993

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.)

Hagan Model ES - 268B - \$3000

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 _____; days/wk _____; wks/yr _____;
 If power plant, hrs/yr _____; If seasonal, describe: _____

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? N/A
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A
 - c. If yes, list non-attainment pollutants. " N/A
- 2. Does best available control technology (BACT) apply to this source?
 If yes, see Section VI. No
- 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
- II. 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.

* This plant will be located outside of a particulate non-attainment area and will be
 exempt from RACT requirements pursuant to Chapter 17-2.650(2)(b)1.

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		
Cement	Dust	1%	20597	See sheets 1 & 5
Flyash	Dust	2%	5121	

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

- Total Process Input Rate (lbs/hr): 65484
- Product Weight (lbs/hr): 82845

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 Emission Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual Y/yr			lbs/yr	Y/yr	
Cement Dust	5	2.6	17-2.650(2) (b)(1)	5	500	260	See sheets
Flyash Dust	10	2.6		10	1000	260	1&5

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)
Hagan ES 268B	particulate	99.0	1 micron	See sheet 1

E. Fuels

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.

Liquid waste will only be generated from aggregate spraying and a dust control spray ring at the batcher.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack): 268
 Stack Height: 38 ft. Stack Diameter: filter area 2. sq. ft.
 Gas Flow Rate: 900 ACFM DSCFM Gas Exit Temperature: ambient °F.
 Water Vapor Content: Dry % Velocity: 90.91 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type D (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: Baghouses will be used for dust collection on the cement and flyash silos. The flyash silo will be loaded 1 time per day, the cement silo will be loaded four times per day. The weigh hopper will vent to cement silo baghouse, particulate emissions during truck loading will be controlled by a spray ring.

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

Stormwater to be retained on site in accordance with F.A.C. 17-25. Wash out facilities will not be located on this site. Aggregate spray and dust control spray ring will be the only water generated by this facility.

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.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
Rates based on 304 cubic yards of ready mix concrete per day.
2. For 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. For 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.
See sheet 1
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
Potential discharge = Emissions/(1-efficiency)
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.)
See sheet 4, 5
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).
See sheet 4
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 sheet 3,5
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 sheet 2
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 sheet 2,5

- 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

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

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:

¹ Explain method of determining efficiency.
² Energy 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:

¹ Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

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

(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

D. 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. Applicant's Maximum Allowable Emission Data

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

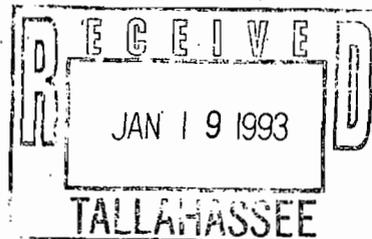
E. Emission Data Used in Modeling

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.

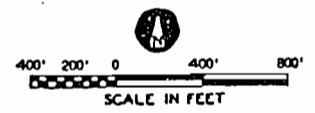
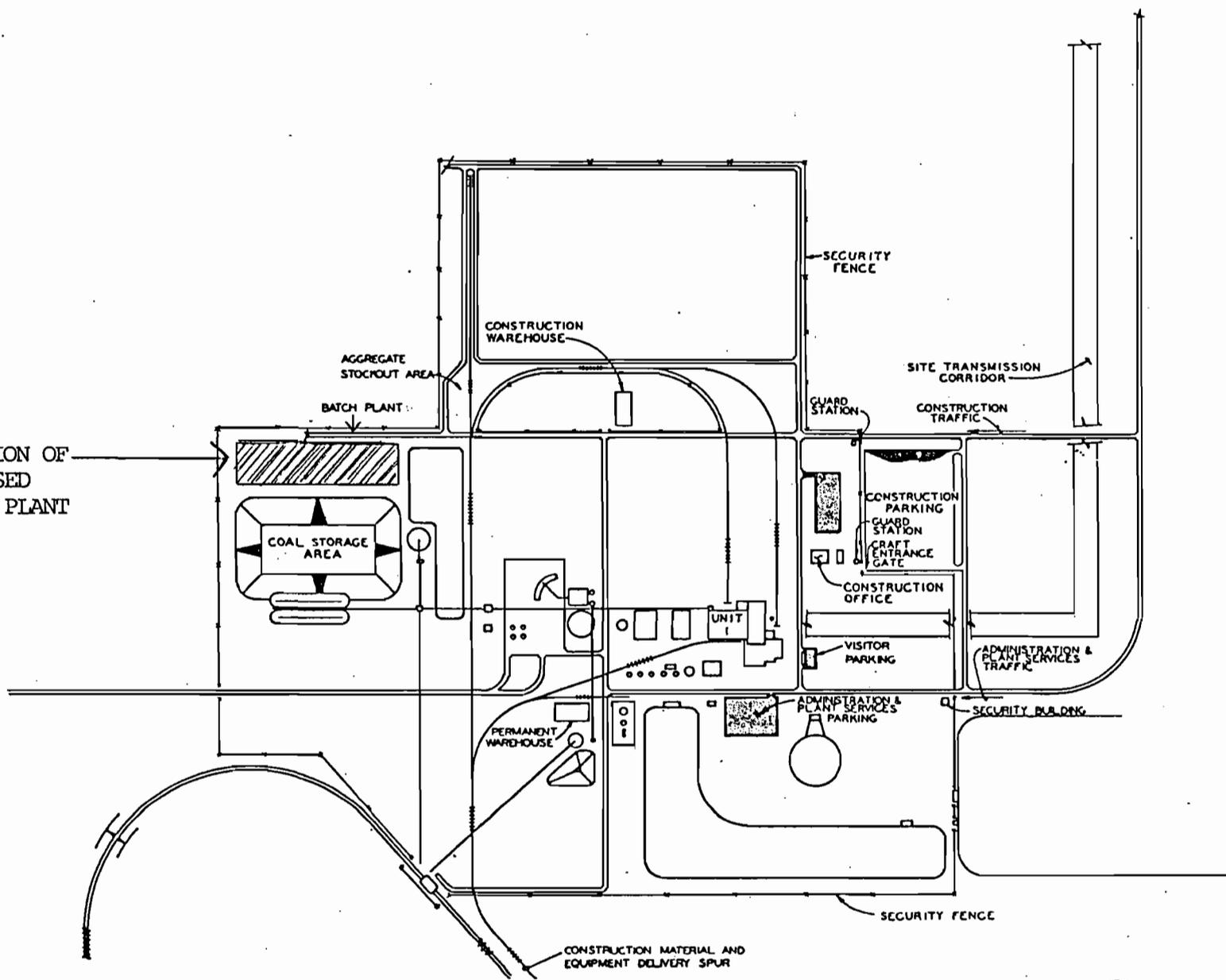
F. Attach all other information supportive to the PSD review.

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.



LOCATION OF
PROPOSED
BATCH PLANT



SITE ROADS AND SECURITY

EXHIBIT B

DESCRIPTION OF THE TEMPORARY CONCRETE BATCH PLANT OPERATION

Florida Mining and Materials (FM&M) proposes to erect a temporary concrete batch plant on the Orlando Utilities Commission (OUC) property so that FM&M can manufacture the concrete required to construct Unit 2 at the Stanton Energy Center. Concrete will be produced by batching portland cement, flyash, coarse and fine aggregate, water, and admixtures in concrete trucks which will then mix the materials as they travel to the construction area that is located on-site and adjacent to the existing Stanton Unit 1 power plant.

OUC has determined that constructing a temporary batch plant in close proximity to the Stanton Energy Center Unit 2 construction site will substantially reduce off site truck traffic, thereby reducing associated environmental impacts. Construction of Stanton Unit 2, including its associated cooling tower, will require approximately 9,500 truckloads of concrete over a three year period. Constructing a temporary batch plant facility at the Stanton Energy Center means that only 1,500 truckloads of aggregate cement, flyash and admixtures will originate off site. The remaining 8,000 truckloads of concrete, that otherwise would also originate off site, (approximately a 20 mile round trip) will originate at the temporary concrete batch plant on site.

OUC has allocated about three acres of land located northwest of the power plant's coal pile for FM&M to construct the temporary facility. The site will be graded so that all stormwater runoff will drain to the existing HDPE underlined soil cement swale that surrounds the coal piles and drains to a lined coal pile runoff storage pond. There will be no strong industrial wastewater generated by FM&M's facility, and the weak industrial wastewater generated will be collected in a concrete sump and completely recycled over the coarse aggregate which drains back to the concrete sump.

FM&M's facility will have one cement silo and one flyash silo. Each silo will be constructed with a Vince Hagan Company ES-268B baghouse which will control emissions generated during pneumatic filling of the silos. Emissions from the weigh hopper which collects the material prior to dumping into the truck are vented to the cement storage silo and the emissions generated during truck loading are controlled by a water spray ring which discharges into the truck during batching.

EXHIBIT C



Florida Department of Environmental Regulation

Southwest District

4520 Oak Fair Boulevard

Tampa, Florida 33610-7547

Lawton Chiles, Governor

813-623-5561

Carol M. Browner, Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT ISSUANCE

DSA

SEP 30 1991

CERTIFIED MAIL

In the Matter of an Application
for Permit by:

Mr. T. Michael Kaney
Vice President
Florida Mining & Materials
Concrete Corporation
Post Office Box 31965
Tampa, Florida 33631-1965 /

DER File No.: A009-201033
County: Citrus

Enclosed is Permit Number A009-201033 to operate a Vince Hagan Company Concrete Batch Plant, issued pursuant to Section 403.087, Florida Statutes and Florida Administrative Code Rules 17-2 & 17-4.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this Permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's subsequent interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes, and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, Florida Administrative Code. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Mr. T. Michael Kaney
Tampa, Florida 33631-1965

Page Three

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



George W. Richardson
Air Permitting Engineer
Southwest District

4520 Oak Fair Boulevard
Tampa, Florida 33610-7347
(813)623-5561, ext 420

cc: William M. Steves, P.E., DSA Group, Inc. ✓

Attachment:

CERTIFICATE OF SERVICE

The undersigned duly designated Deputy Agency Clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed by certified mail before the close of business on SEP 27 1991 to the listed persons.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Harlow Quispel
Clerk

SEP 27 1991
Date



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347
Lawton Chiles, Governor • 813-623-5561 • Carol M. Browner, Secretary

PERMITTEE:

Florida Mining & Materials
Concrete Corporation
Post Office Box 31965
Tampa, Florida 33631-1965

PERMIT/CERTIFICATION:

Permit No.: A009-201033
County: Citrus
Expiration Date: 9-26-96
Project: Concrete Batch Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named Permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the operation of a Vince Hagan Company Model HSM-10250C-400 concrete batch plant with cement and fly ash storage silos. Emissions generated during pneumatic filling of the storage silos are controlled by two Vince Hagan Company Model ES-268B baghouses, one on each silo, with 268 square feet of cloth filtration area. Emissions from the weigh hopper are vented to the cement storage silo. A water spray ring is used to control emissions during truck loading.

Location: at the SE corner of Old U.S. Highway 19 and West Power Line Street, Crystal River, Citrus County

UTM: 17-340.8 E 3204.3 N NEDS NO: 0028 Point ID:
01-Cement Silo
02-Fly Ash Silo

Replaces Permit No.: AC09-195225

PERMITTEE:
Florida Mining & Materials
Concrete Corporation

Permit/Certification No.: A009-201033
Project: Concrete Batch Plant

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Visible emissions from concrete batching plants; silos, hoppers and other storage or conveying equipment shall not exceed 5% opacity (Rule 17-2.600(14)(a), F.A.C.).
3. Test the cement and fly ash storage silos for visible emissions at intervals of 12 months from the date of August 6, 1991 as required by Rule 17-2.700(2)(a)4., F.A.C. Submit a copy of the test data to the Air Compliance Section of the Southwest District Office of the Department of Environmental Regulation within 45 days of such testing as required by Rule 17-2.700(7), F.A.C. Should the Department have reason to believe the visible emissions standard for the hoppers and other storage and conveying equipment is not being met, the Department may require, pursuant to Rule 17-2.700(2)(b), F.A.C., that compliance with the visible emissions standard be demonstrated by testing in accordance with Rule 17-2.700, F.A.C.
4. Compliance with the visible emissions limitations of Specific Condition No. 2 shall be determined using DER Method No. 9 contained in Rule 17-2.700, F.A.C. Pursuant to Rule 17-2.700(1)(d)1.b., F.A.C., the visible emissions test shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The visible emissions test observation period shall include the period during which the highest opacity can reasonably be expected to occur. For the storage silos this is expected to be the last 30 minutes of filling. The minimum requirements for source sampling and reporting, shall be in accordance with Rule 17-2.700, F.A.C.
5. Testing of emissions must be accomplished while filling the cement and fly ash storage silos within $\pm 10\%$ of the permitted capacity of 27 tons per hour. A compliance test submitted at operating rates less than 90% of the permitted capacity will automatically constitute an amended permit at the lesser rate. Failure to submit the input rates and actual operating conditions may invalidate the test (Rule 17-4.070, F.A.C.).
6. The Permittee shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Regulation in writing at least 15 days prior to the date on which each formal compliance test is to begin. The notice shall include, the date, time, and place of each test, and the test contact person who will be responsible for coordinating and having each test conducted (Rule 17-2.700(2)(a)9., F.A.C.).

PERMITTEE:
Florida Mining & Materials
Concrete Corporation

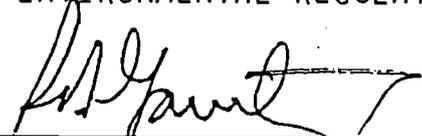
Permit/Certification No.: A009-201033
Project: Concrete Batch Plant

7. The operation of this plant shall not exceed 12 hours/day, 6 days/week, & 44 weeks/year.

8. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include the use of water sprinklers to prevent and control fugitive particulates from plant grounds and aggregate storage piles and the use of the water spray ring at the truck loadout.

9. Four applications to renew this operating permit shall be submitted to the Air Permitting Section of the Southwest District Office of the Department of Environmental Regulation at least 60 days prior to its expiration date (Rule 17-4.090, F.A.C.).

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

4520 Dak Fair Boulevard
Tampa, Florida 33610-7347
(813)623-5561

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

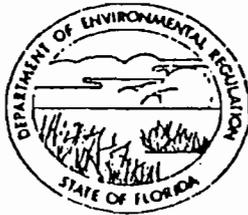
- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Temporary Concrete Batch Plant [X] New¹ [] Existing¹

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

COMPANY NAME: FLORIDA MINING & MATERIALS CONCRETE CORPORATION COUNTY: Citrus

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 and Flyash Silo

SOURCE LOCATION: Street SE corner of Old U.S. Hwy 19 and City Crystal River

UTM: East West Power Line Street 340819 North 3204335

Latitude 28 ° 57 ' 46 "N Longitude 82 ° 37 ' 57 "W

APPLICANT NAME AND TITLE: T. Michael Kaney, Vice President

APPLICANT ADDRESS: P.O. Box 31965, Tampa, Florida 33631-3965

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Florida Mining & Materials Concrete Corporation

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: T. Michael Kaney

T. Michael Kaney, Vice President
Name and Title (Please Type)

Date: 4/4/91 Telephone No. 813/933-6711

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)

E. Requested permitted equipment operating time: hrs/day 12 ; days/wk 6 ; wks/yr 44 ;
if power plant, hrs/yr _____ ; if seasonal, describe: _____

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? N/A
 - b. If yes, has "Lowest Achievable Emission Rate" been applied? N/A
 - c. If yes, list non-attainment pollutants. " N/A
- 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. No
- 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

- II. 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.

* This plant will be located outside of a particulate non-attainment area and will be
exempt from RACT requirements pursuant to Chapter 17-2.650(2)(b)1.

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)
Hagan ES 268B	particulate	99.0	1 micron	See sheet 1

E. Fuels

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.

Liquid waste will only be generated from aggregate spraying and a dust control spray ring at the batcher.

Brief description of operating characteristics of control devices: Baghouses will be used for dust collection on the cement and flyash silos. The flyash silo will be loaded 1 time per day, the cement silo will be loaded four times per day. The weigh hopper will vent to cement silo baghouse, particulate emissions during truck loading will be controlled by a spray ring.

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

Stormwater to be retained on site in accordance with F.A.C. 17-25. Wash out facilities will not be located on this site. Aggregate spray and dust control spray ring will be the only water generated by this facility.

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.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
Rates based on 304 cubic yards of ready mix concrete per day.
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.
See sheet 1
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
Potential discharge = Emissions/(1-.990)
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.)
See sheet 4, 5
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).
See sheet 4
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 sheet 3,5
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 sheet 2
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 sheet 2,5

5. Useful Life:

7. Energy:

9. Emissions:

6. Operating Costs:

8. Maintenance Cost:

Contaminant

Rate or Concentration

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:

¹ Explain method of determining efficiency.

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

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:¹

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

(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).

DESCRIPTION OF OPERATION CHARACTERISTICS

Briefly, the process flow is: sand and aggregate are loaded into the aggregate hopper which leads to the aggregate weigh hopper. From this point the aggregate (sand and rock) is moved via a conveyor belt to a point below the cement/flyash weigh hopper, at this point the aggregate and cement and flyash are loaded into the trucks for onboard mixing. The flyash is moved from the flyash silo to the cement/flyash weigh hopper by an enclosed screw auger. The cement is gravity loaded into the cement/flyash weigh. This enclosed system is vented back into the cement silo so the potential emissions can be controlled by the cement silo baghouse. The dry material ie., cement, flyash as well as the aggregate is loaded into trucks for mixing. A spray ring located just above the truck loading point will be used to control fugitive emissions at this point of material transfer.

$253.57 \frac{\text{CY}}{\text{day}} \times \frac{\text{days}}{\text{week}} \times 44 \frac{\text{weeks}}{\text{year}} = 66942.55 \text{ CY/YEAR} = 262454965.9 \text{ LBS/YR}$

CEMENT LOADS PER DAY 4
 FLYASH LOADS PER DAY 2

OPERATION 6 DAYS/WK X 12 HRS/DAY X 44 WKS/YR = 3168 HRS/YR OPERATION

TOTAL CEMENT REQUIRED:

658 LBS./CY X 253.57 $\frac{\text{CY}}{\text{DAY}}$ = 166649.24 LBS/DAY 13904.10 LBS/HR 83.42 TON/DAY

TOTAL SAND REQUIRED

1030 LBS./CY X 253.57 $\frac{\text{CY}}{\text{DAY}}$ = 261177.38 LBS/DAY 21764.78 LBS/HR 130.59 TON/DAY

TOTAL FLYASH REQUIRED

163.6 LBS./CY X 253.57 $\frac{\text{CY}}{\text{DAY}}$ = 41484.10 LBS/DAY 3457.01 LBS/HR 20.74 TON/DAY

TOTAL AGGREGATE REQUIRED

1769 LBS./CY X 253.57 $\frac{\text{CY}}{\text{DAY}}$ = 448565.81 LBS/DAY 37360.48 LBS/HR 224.28 TON/DAY

TOTAL WATER & ADMIX REQUIRED

300 LBS./CY X 253.57 $\frac{\text{CY}}{\text{DAY}}$ = 76071.00 LBS/DAY 6339.25 LBS/HR 35.04 TON/DAY

MAXIMUM TONS/YEAR

6 DAYS/WK X 44 WEEKS/YEAR = 264 DAYS/YEAR OPERATION
 CEMENT LOADING 4 HRS/DAY = 1056 HRS/YEAR LOADING TIME
 FLYASH LOADING 2 HRS/DAY = 528 HRS/YEAR LOADING TIME

CONTROLLED

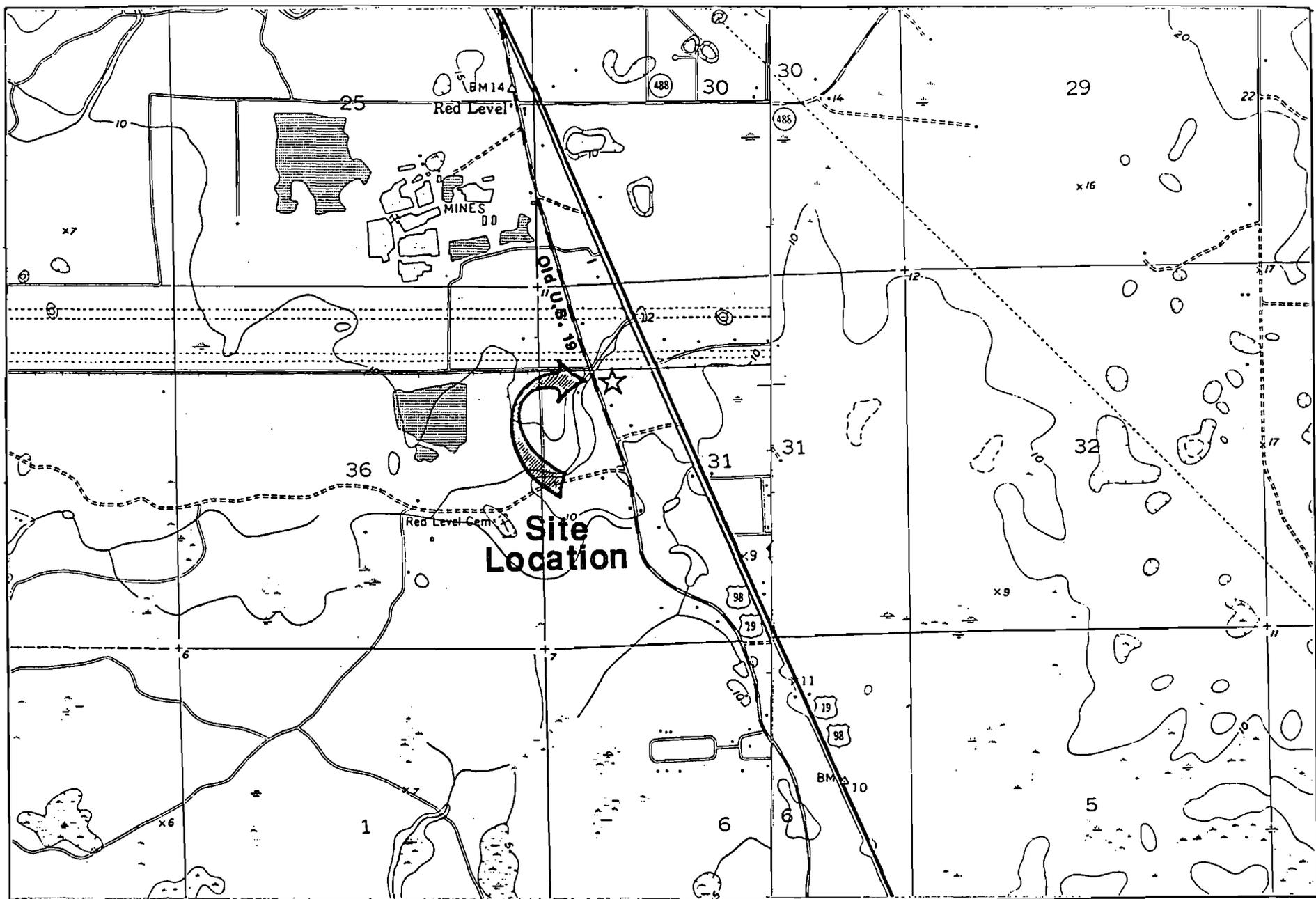
MAXIMUM 50000 LBS/HR LOADING X (99.0) EFFICIENCY
 CEMENT X 1% DUST = 5.00 LBS/HR CEMENT DUST
 FLYASH X 2% DUST = 10.00 LBS/HR FLYASH DUST
 CEMENT 1056 HRS/YR X 5.00 LB CEMENT DUST /2000 LBS 2.64 TONS/YR
 FLYASH 528 HRS/YR X 10.00 LB FLYASH DUST /2000 LBS 2.64 TONS/YR

UNCONTROLLED

MAXIMUM 50000 LBS/HR LOADING RATE
 CEMENT X 1% DUST = 500 LBS/HR CEMENT DUST
 FLYASH X 2% DUST = 1000 LBS/HR FLYASH DUST

Particular Emissions Calculations

FM&MC Corp.



Location Map

Source: U.S.G.S. Red Level, Florida, 1954, Photorevised 1988.



FM&MC Corp.

THE VINCE HAGAN CO.

Designers, Engineers & Manufacturers of Concrete Washing Plants and Material Handling Equipment

SPECIFICATIONS

MODEL ES-268B BAGHOUSE

JANUARY, 1971

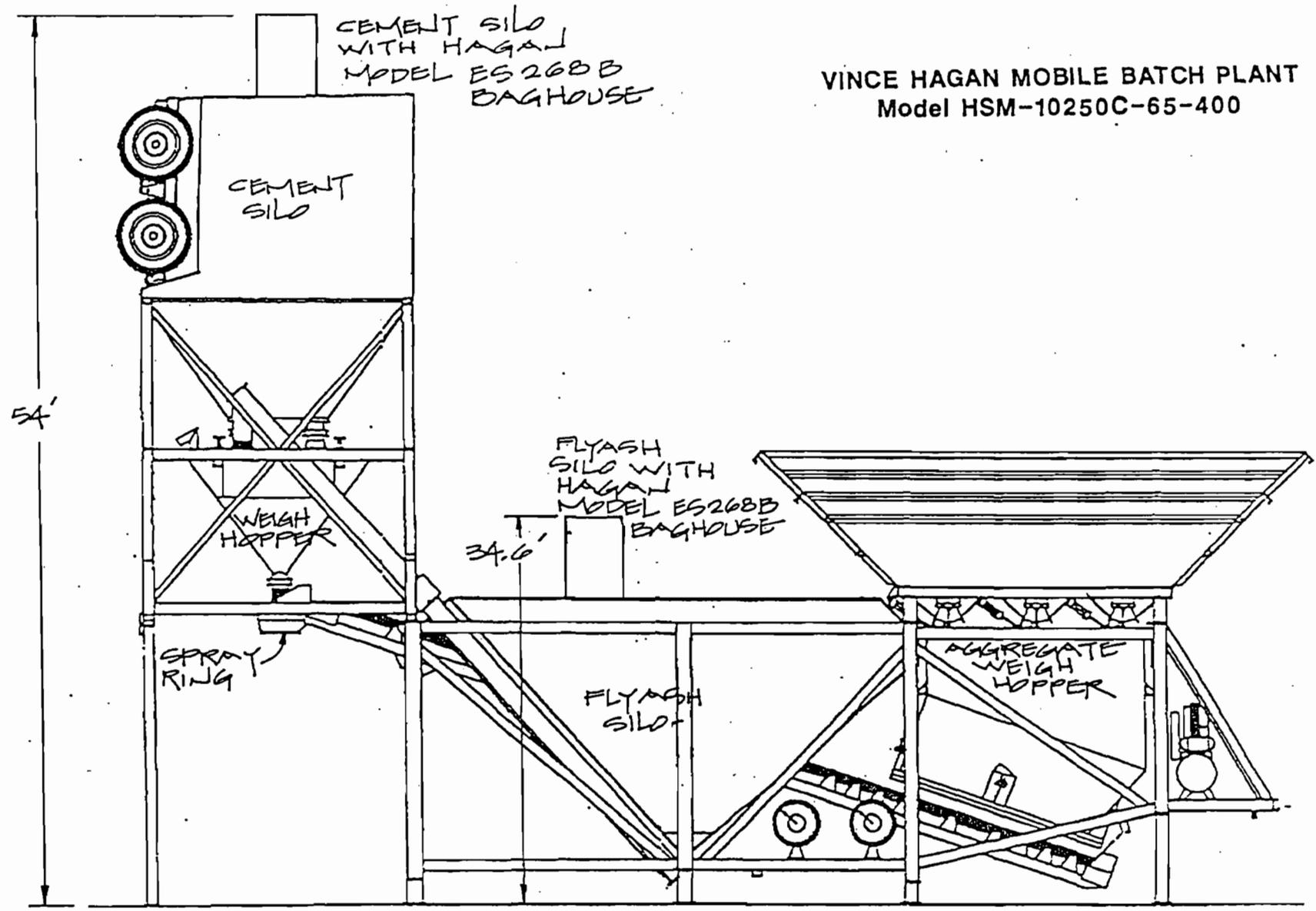
CLOTH FILTERING AREA	268.0 SQ. FT.
AIR TO CLOTH RATIO	3 TO 1
NUMBER OF BAGS	20
BAG DIAMETER	8"
BAG LENGTH	77"
BAG WEIGHT	5.4 OZ./SQ. YD.
CLOTH TYPE	SILICONIZED ALL-FILAMENT DACRON/POLYESTER
THREAD COUNT	77 X 70 PER SQUARE INCH
PERMEABILITY	18 TO 28 CFM/SQ. FT. CLOTH AREA AT 1/2" GAUGE RESISTANCE
AIR VOLUME INTAKE (3 HP BLOWER)	500 CFM
EXHAUST OPENING SIZE	6"
EFFICIENCY	99% AT 1 MICRON
METHOD OF CLEANING BAGS	AIR VIBRATOR
DIMENSIONS (WITH BLOWER ATTACHED)	3' - 3" X 3' - 9-1/2" X 9' - 1-1/2"
WEIGHT	921 LBS. (NOT INCLUDING MOUNTING FLANGE)
MANUFACTURER	THE VINCE HAGAN COMPANY

Specifications



FM&MC Corp.

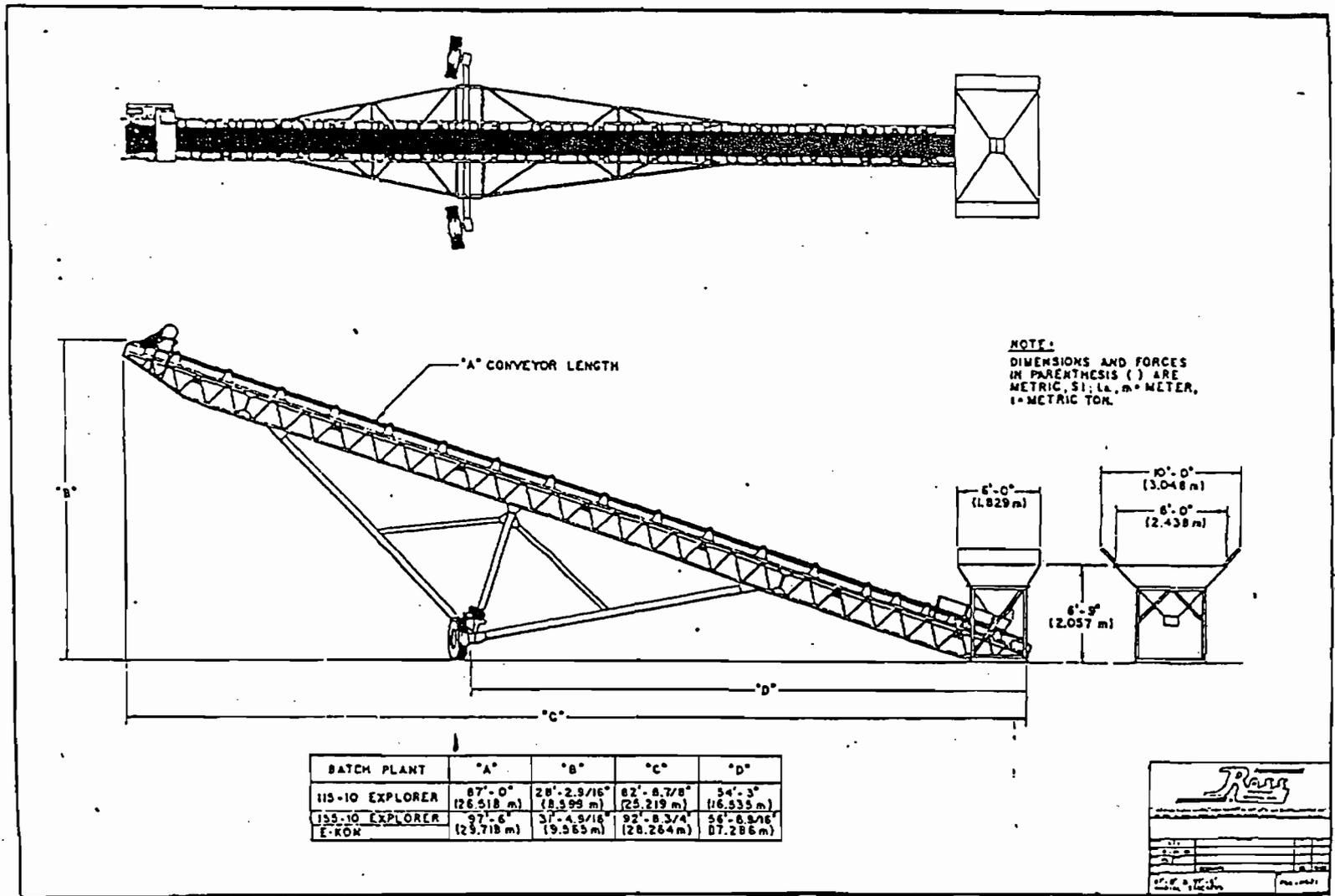
VINCE HAGAN MOBILE BATCH PLANT
Model HSM-10250C-65-400



Process Flow Diagram



FM&MC Corp.



Specifications



FM&MC Corp.



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DEC 07 1992

ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 Division of Air Resources Management

Certified Mail No. P744-600-672
Return Receipt Requested

December 4, 1992

Mr. Brian Beals
U. S. Environmental
Protection Agency
Region IV
345 Courtland Street, N. E.
Atlanta, GA 30365

Re: Stanton Energy Center - Unit 2 - PSD-FL-084
Administrative Revision to Ammonia Slip Limitation

Dear Mr. Beals:

On December 23, 1991, the Orlando Utilities Commission was issued a permit to construct Unit 2 at the Curtis Stanton Energy Center, under the rules for the Prevention of Significant Deterioration (PSD) of air quality. In a subsequent discussion between you and Mr. Thomas B. Tart of Orlando Utilities Commission, agreement was reached to revise the ammonia slip emission limitation in Condition 16 of the PSD Permit. (See enclosed letter correspondence from Mr. Tart to Mr. Beals dated January 24, 1992).

The agreed revision will change the ammonia slip from a limit of 5 ppmvw to 30 ppmvw. The reason for the change is to allow Orlando Utilities Commission greater flexibility in the design, procurement, installation and operation of appropriate nitrogen oxides controls, and at the same time maintaining a reasonable ammonia slip limitation.

Because this revision does not impact substantive provisions of the Permit to Construct, i. e., does not increase the emissions of criteria pollutants or violate air quality increments, and does not impact ambient air quality standards, the revisions can be accomplished by administrative change.



Mr. Brian Beals
December 4, 1992
Page 2

Orlando Utilities Commission hereby requests that the appropriate administrative change be made to permit PSD-FL-084. If you have questions or need clarification, please call me at 407/423-9141.

Very truly yours,



G. A. DeMuth
Director
Environmental Division

GAD:rc
Enclosure

xc: W. H. Herrington
T. B. Tart
D. M. Standridge
F. F. Haddad
K. P. Ksionek
H. E. Smith (B&V)
L. Keeseey - YVVB
C. H. Fancy - DER Tall.
Certified Mail No. P-744-600-673



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FEB 11 1992

BLACK & VEATCH

ORLANDO UTILITIES COMMISSION

500 SOUTH ORANGE AVENUE • P. O. BOX 3193 • ORLANDO, FLORIDA 32802 • 407/423-9100

January 24, 1992

13 199

Mr. Brian Beals
United States Environmental
Protection Agency
Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

Re: Orlando Utilities Commission
Stanton Energy Center Unit 2
PSD-FL-084

Dear Mr. Beals:

Thank you for your courtesies in arranging our most constructive telephone conference yesterday. Throughout this entire PSD permitting process for Orlando Utilities Commission Stanton 2, you and your staff have been most cooperative.

As we discussed in the referenced conference call, we will not submit a petition of appeal to the Administrator to review permit No. PSD-FL-084 expressly because of your commitment to support a modification of the ammonia slip emission limitation in Condition 16 from a limit of 5 ppmvw to 30 ppmvw. As we all agree, this modification allows Orlando Utilities Commission the flexibility to choose nitrogen oxide control technologies which were contemplated by Condition 17. The current limit of 5 ppmvw for ammonia emissions would allow only SCR technologies to be used.

Condition II/I.A.1.f. in the Florida Supplemental Site Certification contains a limitation of 0.033 lb/MMBtu H₂SO₄ emissions. In order to allow OUC to use the intended SCR technology successfully, OUC will need to modify this limit to 0.066 lb/MMBtu.

OUC and EPA both agree that the EPA has no jurisdiction over the state permit and that the EPA will

ERRY CHICONE, JR.
President

ROYCE B. WALDEN
First Vice President

RICHARD L. FLETCHER, JR.
Second Vice President

JAMES H. PUGH, JR.
Past President

BILL FREDERICK
Mayor

T. C. POPE
Executive Vice President
& General Manager

THOMAS B. TART
General Counsel



not object when OUC petitions for an amendment to this condition.

Thank you again for your cooperation.

Very truly yours,

Thomas B. Tart

Thomas B. Tart

TBT/kdh

cc: Gregg Worley
Nancy Pommella, Attorney-at-Law
H. S. Owen
Richard Donelan, Attorney-at-Law