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KOUGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 024-98-01

FAX TRANSMITTAL FORM

TO: *Cleve Holladay*

FAX NO. _____

FROM: *John Kougler*

DATE: *11/17/99* SENT BY: *Mandy*

The text being transmitted consists of 3 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: _____

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8/15/99

Plant-wide PM10 Emissions

FAKED
11/15/99
Close to/under

| <u>Total VMT</u> | Vehicles/day | mileage | VMT/day |
|------------------|--------------|---------|---------|
| Cement loaded | 112 | 0.67 | 75.04 |
| empty | 112 | 0.62 | 69.44 |
| Coal loaded | 16 | 0.90 | 14.40 |
| empty | 16 | 0.90 | 14.40 |
| Materials loaded | 22 | 0.78 | 17.16 |
| empty | 22 | 0.78 | 17.16 |
| Clay loaded | 7 | 0.91 | 6.37 |
| empty | 7 | 0.91 | 6.37 |
| Autos in | 105 | 0.53 | 55.65 |
| out | 105 | 0.53 | 55.65 |

331.64
VMT/day

Aug Vehicle Wt.

Aug Vehicle Weight (Weighted Avg based on VMT)

$$\begin{aligned} & \text{Cement loaded } (32.25 \text{ tons}) \times 75.04 \text{ VMT} + \\ & \text{Cement empty } (12.75 \text{ tons}) \times 69.44 \text{ VMT} + \end{aligned}$$

$$\text{Autos in } (1.5 \text{ tons}) \times 55.65 \text{ VMT} +$$

$$\text{Autos out } (1.5 \text{ tons}) \times 55.65 \text{ VMT} = 6026.89$$

$$\times 1/331.64 \text{ VMT}$$

$$= 18.17 \text{ tons/veh.}$$

Emissions of PM10 Aug Vehicle Wt

$$E = 0.016 (0.4/e)^{0.65} (18.17/3)^{1.5} \times 331.64 \frac{\text{Veh-mi}}{\text{day}}$$

$$= 27.8 \text{ lb PM10/day based on avg vehicle wt}$$

Modeled E = 35.9 lb PM10/day (Pg 4 of 11/14/99 Rpt)
 Modeled greater than Emissions from Avg Veh. Wt!

Link AB PM10 Emissions

| <u>Total VMT</u> | Vehicle/day | Length A-B (miles) | VMT/day |
|------------------|-------------|-----------------------|-------------------|
| Cement loaded | 112 | 0.43 | 48.16 |
| empty | 112 | 0.43 | 48.16 |
| Coal loaded | 16 | 0.43 | 6.88 |
| empty | 16 | 0.43 | 6.88 |
| Material loaded | 22 | 0.43 | 9.46 |
| empty | 22 | 0.43 | 9.46 |
| Clay loaded | 7 | 0.43 | 3.01 |
| empty | 7 | 0.43 | 3.01 |
| Autos In | 105 | 0.43 | 45.15 |
| Out | 105 | 0.43 | 45.15 |
| | 324 Veh/day | | 225.32 VMT/day |

Avg Vehicle wt.

$$\text{Cement loaded (39.25 tons)} \times 48.16 \text{ VMT} +$$

$$\text{Cement empty (12.75 tons)} \times 48.16 \text{ VMT} +$$

⋮

$$\text{Autos out (1.5 tons)} \times 45.15 \text{ VMT} = 3675.00 \text{ Veh-ton mi/day}$$

$$\times 1/225.32 \text{ Veh-mile/day}$$

$$= 16.31 \text{ tons/vehicle}$$

Emissions of PM10 - Avg Vehicle wt.

$$= 0.016 (0.4/2)^{0.65} (16.31/5)^{1.5} \times 225.32 \text{ Veh-miles/day}$$

$$= 16.0516 \text{ PM10/day from Link AB based on}$$

avg vehicle weight (cont)

Link AB (continued)

Emissions of R PM10 - Individual Vehicle Wts

$$E = 0.016 (0.4/2)^{0.65} \times$$

$$\left[\text{Cement loaded} = (39.25/3)^{1.5} \times 112 \times 0.43 \text{ mi} \right.$$

+

⋮

$$\left. + \text{Autos out} = (1.5/3)^{1.5} \times 105 \times 0.43 \text{ mi} \right]$$

$$= 0.016 (0.4/2)^{0.65} (3219.56)$$

$$= 22.03 \text{ lb PM10 from Link AB used in model}$$

Note: From page 7 of 8/14/99 Fax,
the emissions from Link AB are
21.60 lb PM10 / day

Modeled emissions of fugitive PM10 emissions
are greater than emissions calculated
from Avg Vehicle wt.



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 624-98-01

FAX TRANSMITTAL FORM

TO: Cleve Hilladay

FAX NO. _____
FROM: John Koogler
DATE: 11/15/99 SENT BY: [Signature]

The text being transmitted consists of 3 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: Cleve
Here is additional verification that the
negative PM10 emissions modeled (calculated
from individual vehicle weights) are greater
than PM10 emissions calculated from any
vehicle weight [Signature]

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8/15/99

Plant - Wide PM10 Emissions

| <u>Total VMT</u> | Vehicles/day | mileage | VMT/day |
|------------------|--------------|---------|---------|
| Cement loaded | 112 | 0.67 | 75.04 |
| empty | 112 | 0.62 | 69.44 |
| Coal loaded | 16 | 0.90 | 14.40 |
| empty | 16 | 0.90 | 14.40 |
| Material loaded | 22 | 0.78 | 17.16 |
| empty | 22 | 0.78 | 17.16 |
| Clay loaded | 7 | 0.91 | 6.37 |
| empty | 7 | 0.91 | 6.37 |
| Auto in | 105 | 0.53 | 55.65 |
| out | 105 | 0.53 | 55.65 |

331.64
VMT/day

Aug Vehicle Wt.

Avg Vehicle Weight (Weighted Avg based on VMT)

Cement loaded (32.25 tons) x 75.04 VMT +

Cement empty (12.75 tons) x 69.44 VMT +

Auto in (1.5 tons) x 55.65 VMT +

Auto out (1.5 tons) x 55.65 VMT = 6026.89

x 1/331.64 VMT

= 18.17 tons/veh.

Emissions of PM10 Aug Vehicle Wt

$$E = 0.016(0.4/e)^{0.65} (18.17/3)^{1.5} \times 331.64 \frac{\text{Veh-mi}}{\text{day}}$$

= 22.8 lb PM10/day based on avg vehicle wt

Model E = 35.9 lb PM10/day (Pg 4 of 11/14/99 Rep)
Model greater than Emissions from Avg Veh. Wt!

Link A-B PM10 Emissions

| <u>Total VMT</u> | <u>Vehicle/day</u> | <u>Length A-B (miles)</u> | <u>VMT/day</u> |
|------------------|--------------------|---------------------------|-----------------------|
| Cement loaded | 112 | 0.43 | 48.16 |
| Cement empty | 112 | 0.43 | 48.16 |
| Cool loaded | 16 | 0.43 | 6.88 |
| Cool empty | 16 | 0.43 | 6.88 |
| Material loaded | 22 | 0.43 | 9.46 |
| Material empty | 27 | 0.43 | 9.46 |
| Clay loaded | 7 | 0.43 | 3.01 |
| Clay empty | 7 | 0.43 | 3.01 |
| Autos In | 105 | 0.43 | 45.15 |
| Autos Out | 105 | 0.43 | 45.15 |
| | <u>524 Veh/day</u> | | <u>225.32 VMT/day</u> |

Avg Vehicle Wt

Cement loaded (39.25 tons) x 48.16 VMT +

Cement empty (2.75 tons) x 48.16 VMT +

⋮

Autos out (1.5 tons) x 45.15 VMT = 3675.00 Veh-ton mi/day

x 1/225.32 Veh-mile/day

= 16.31 tons/vehicle

Emissions of PM10 - Avg Vehicle Wt

= 0.016 (0.4/2)^{0.65} (16.31/2)^{1.5} x 225.32 Veh-mile/day

= 16.05 lb PM10/day from Link A-B based on

avg vehicle weight (cont)

Link AB (continued)

Emissions of PM₁₀ - Individual Vehicle Wts

$$E = 0.016 (0.4/2)^{0.65} \times$$

$$\left[\text{Count loaded} = (39.25/3)^{1.5} \times 112 \times 0.43 \text{ mi} \right.$$

+

$$\left. + \text{Autos out} = (1.5/3)^{1.5} \times 105 \times 0.43 \text{ mi} \right]$$

$$= 0.016 (0.4/2)^{0.65} (3219.56)$$

$$= 22.03 \text{ lb PM}_{10} \text{ from Link AB used in model}$$

Note: From page 7 of 8/14/99 Fax,
the emissions from Link AB are
21.60 lb PM₁₀ / day

Modeled emissions of fugitive PM₁₀ emissions
are greater than emissions calculated
from Avg Vehicle wt.

cc: C. Helladay

NPS

EPA

NED

File cy



**KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES**

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 624/98/01

FAX TRANSMITTAL FORM

TO: Clew Holladay

FAX NO. _____
FROM: John Koogler
DATE: 11/15/99 SENT BY: JLK

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Link AB / hour 6 + 21

CE / CF vs. Cement (avg)

12.75 / 39.25 tons vs 26.00 tons

$$CE = 0.016 (0.4/2)^{0.65} (12.75/3)^{1.5} = 0.049 \text{ lb/VMT}$$

$$CF = 0.016 (0.4/2)^{0.65} (39.25/3)^{1.5} = 0.266$$

$$\text{Total In + Out} = 0.315 \text{ lb/VMT}$$

$$\text{Avg} = 0.158 \text{ lb/VMT}$$

Modeled

$$C_{\text{avg}} = 0.016 (0.4/2)^{0.65} (26.00/3)^{1.5} = 0.143 \text{ lb/VMT}$$

Link AB / hours 7, 10-15, 18-20

All trucks

$$CE = 0.049 \text{ lb/VMT} \times 7.00 \text{ Veh/Ln} = 0.343 \text{ lb/hr-mi}$$

$$CF = 0.266 \times 7.00 = 1.862$$

$$CO_e = 0.058 \times 1.14 = 0.066$$

$$CO_f = 0.266 \times 1.14 = 0.303$$

$$M_e = 0.058 \times 1.57 = 0.091$$

$$M_f = 0.266 \times 1.57 = 0.418$$

$$CL_e = 0.058 \times 0.50 = 0.029$$

$$CL_f = 0.266 \times 0.50 = 0.133$$

20.42

3.245

Avg

0.159

lb/VMT

Modeled

$$\text{Avg Truck Wt} = [26.00 \times 7.00 + 26.75 (1.14 + 1.57 + 0.50)] / 10.21$$

$$= 26.24 \text{ tons}$$

$$E = 0.016 (0.4/2)^{0.65} (26.24/3)^{1.5} = 0.145 \text{ lb/VMT}$$

Link AB / hours 8, 9, 16, 17

All trucks @ 20.42 Veh/hr (in + out)

Autos @ 35.00 Veh/hr (in + out)

All trucks

$$0.159 \text{ lb/UMT} \times 20.42 \text{ Veh/hr} = 3.245 \text{ lb/hr-mi}$$

Autos

$$0.016(0.4/2)^{0.65} (1.5/3)^{1.5} \times 35.00 \text{ Veh/hr} = 0.070 \text{ lb/hr-mi}$$

$$3.315 \text{ lb/hr-mi}$$

$$\text{Avg Factor} = \frac{3.315 \text{ lb}}{\text{hr-mi}} \times \frac{1}{(20.42 + 35.00)} \frac{\text{hr}}{\text{veh}}$$

$$= 0.060 \text{ lb/veh-mi} \quad - \text{ Modeled}$$

Avg Vehicle wt

$$= \left[\frac{26.24 \text{ tons}}{\text{truck}} \times \frac{20.42 \text{ trucks}}{\text{hr}} \right] + \left[\frac{1.5 \text{ tons}}{\text{car}} \times \frac{35 \text{ cars}}{\text{hr}} \right]$$

$$[20.42 + 35.00]$$

$$= 10.62 \text{ tons/veh}$$

Factor based on Avg

$$= 0.016(0.4/2)^{0.65} (10.62/3)^{1.5}$$

$$= 0.037 \text{ lb/veh-mi}$$

File of



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 624-98-01

FAX TRANSMITTAL FORM

TO: Chris Carlson for Clive Holladay

FAX NO. _____

FROM: Steve Cullen

DATE: 11/15/99 SENT BY: SCC

The text being transmitted consists of 5 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

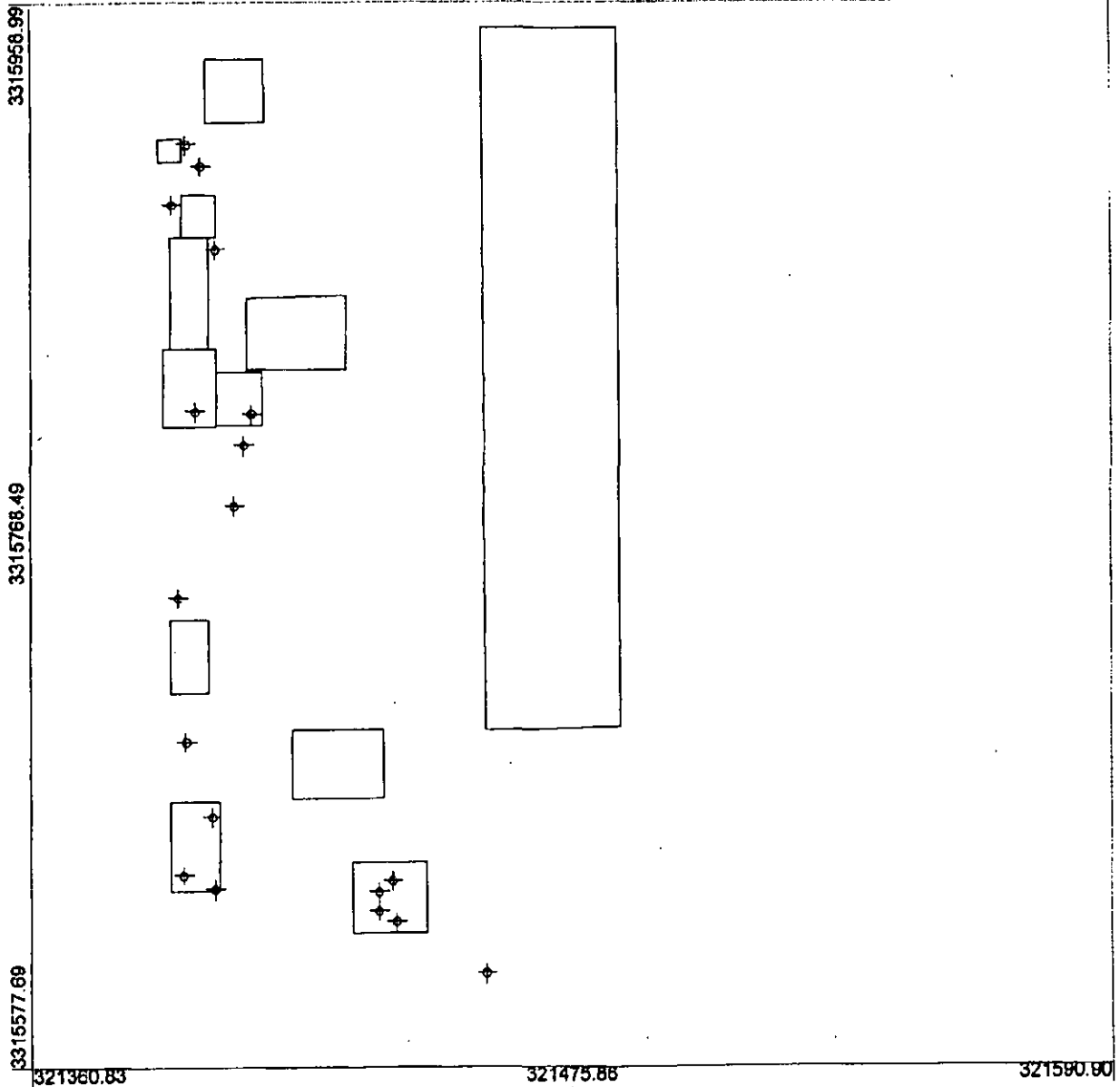
REMARKS: BPIP backup information. Other building heights
from large-scale drawings for Florida Rock Plant.

SC

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PROJECT NAME :

Suwannee American Cement



COMMENTS :

BUILDINGS :

12

COMPANY NAME :

Koogler & Associates

SOURCES :

18

MODELER :

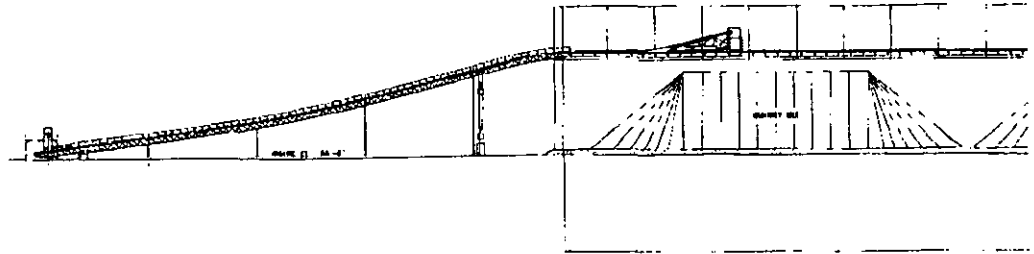
Steve Cullen

PROJECT NO. :

DATE :

11/15/99

FAR MATERIAL TRANSPORT

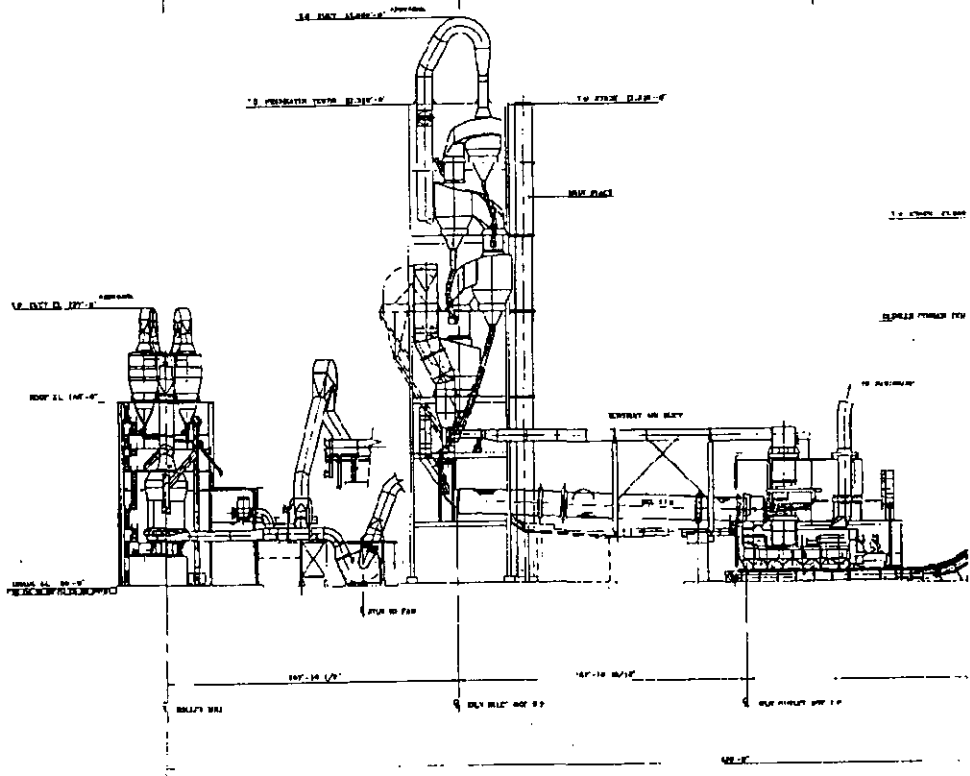


ROLLER MILL

PREHEATER

ROTARY KILN

LINKER SYSTEM

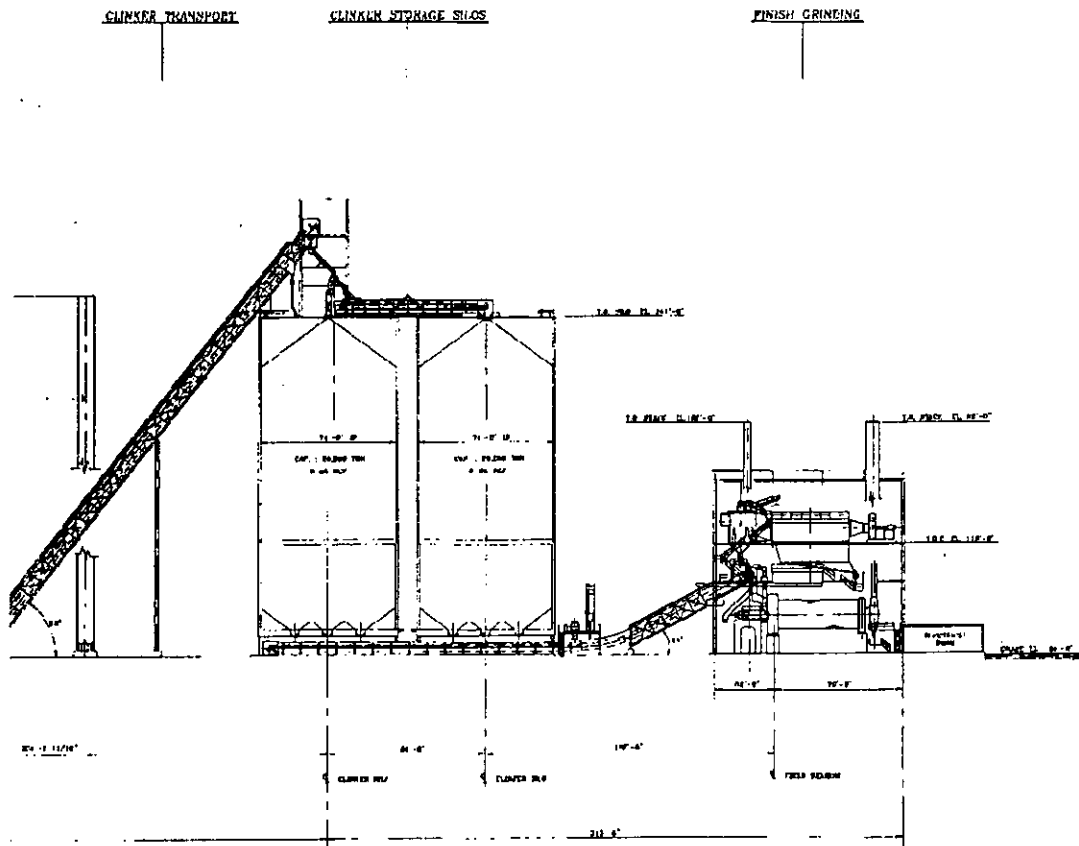
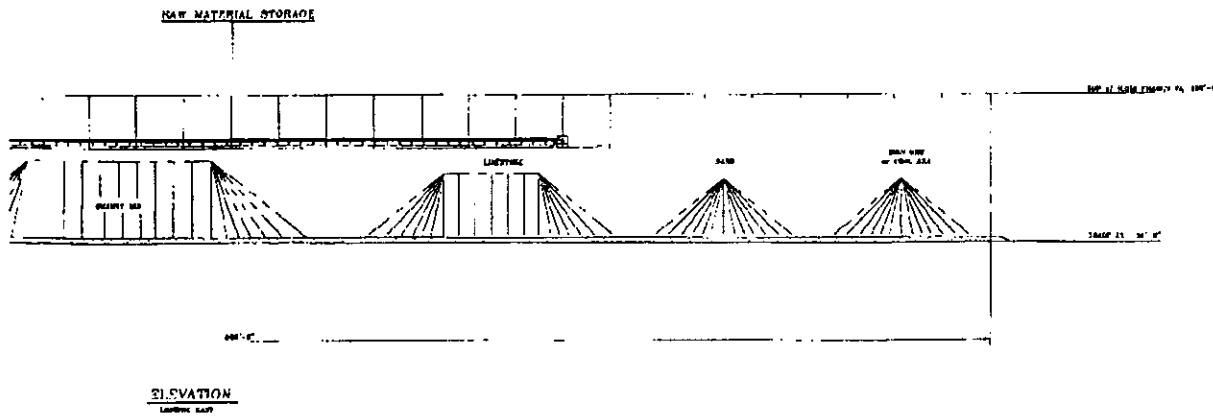


10/30/98 16:56 CCP 323-SEC.dwg

| | | | | | | | |
|------|------|-----------|----|--------|--|-------------------|-----|
| | | | | | | DESIGNED | FAD |
| | | | | | | DRAWN | TEG |
| | | | | | | CHECKED | FAD |
| | | | | | | F.A. DARABI, P.E. | |
| | | | | | | PROJECT ENGINEER | |
| LTR. | DATE | REVISIONS | BY | APPRD. | | | |

DARABI AND ASSOCIATES INC.

730 Northeast Waldo Road Suite A - Gainesville, Florida 32641 • (352) 376-6683

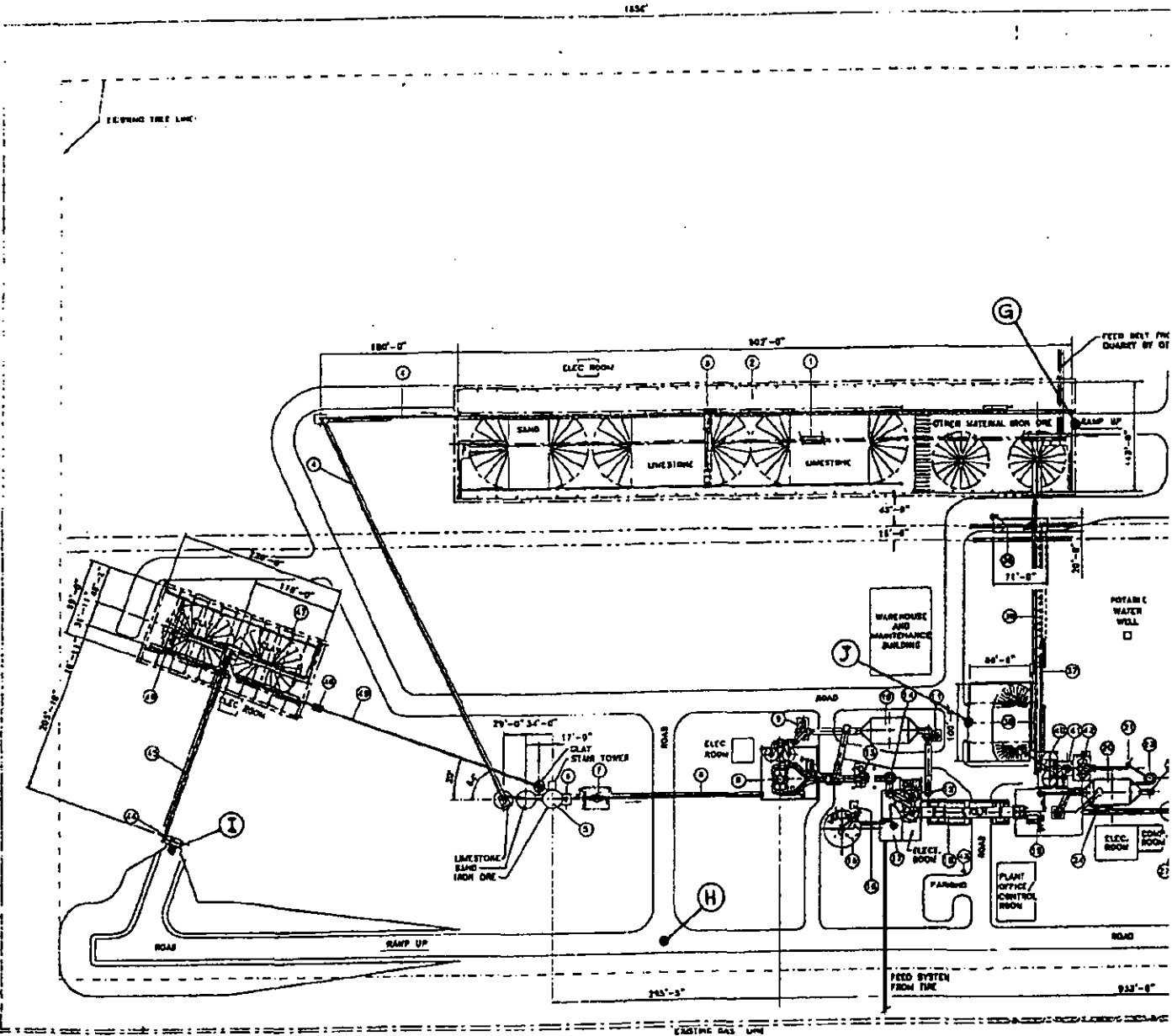


NOTE:
 FINAL ARRANGEMENT OF STRUCTURES AND IMPROVEMENTS MAY BE ALTERED AS A RESULT OF GEOTECHNICAL CONSIDERATIONS AND OTHER CONDITIONS UNKNOWN AT THIS TIME. REQUIRED BUFFER AREAS AND SETBACKS WILL BE MAINTAINED IN THE EVENT A SHIFT OR ALTERNATE PLANT LAYOUT IS REQUIRED.



MEMBER OF BETHLEHEM STEEL CORP. ATLANTA, GA

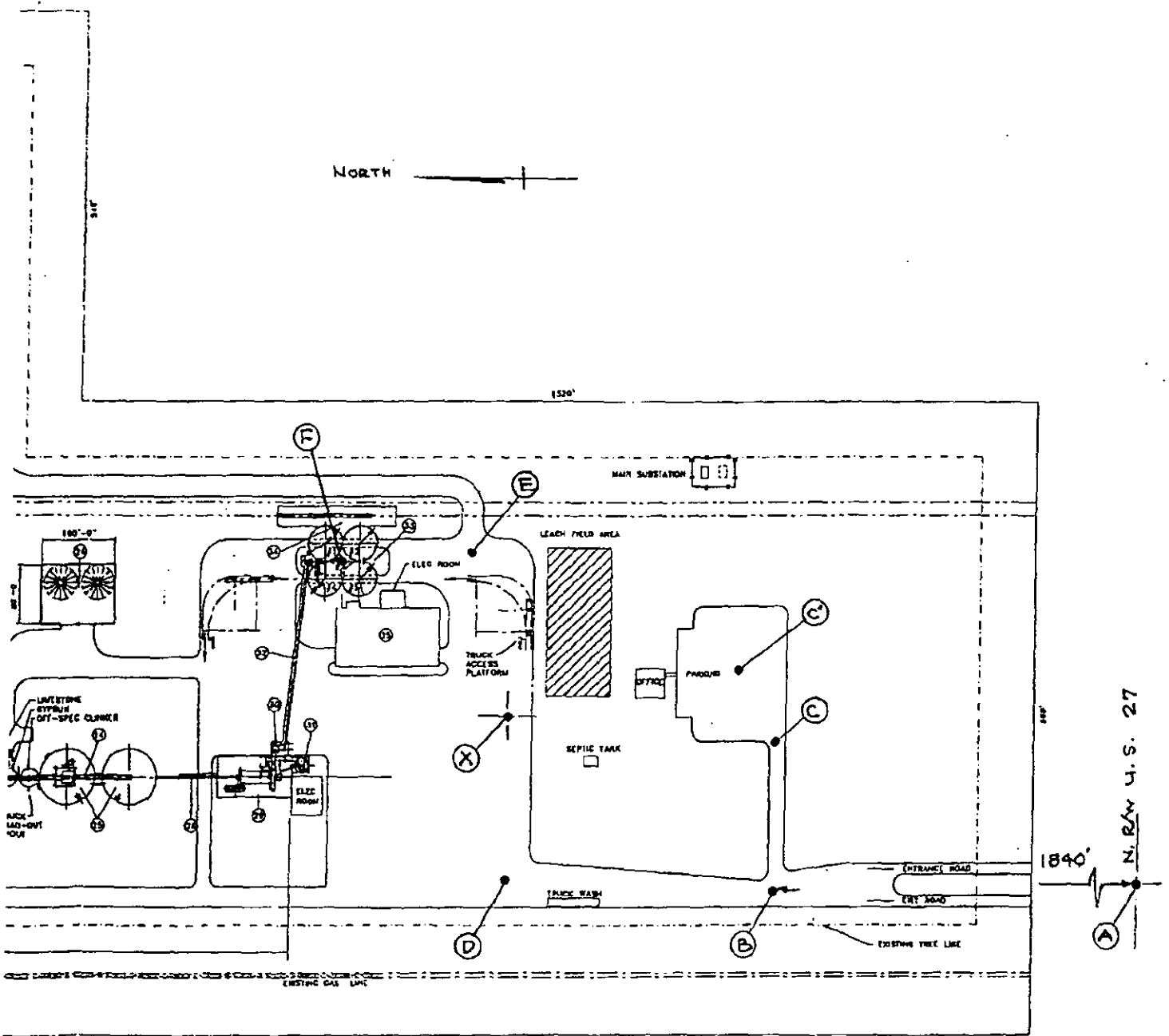
| | | | | |
|----------------------------------------------------------------|---------------------------|---------------------|-----------------|--------------|
| SUWANNEE AMERICAN CEMENT Co BRANFORD PLANT | SITE CROSS SECTION | APPROVED FOR O&A BY | DATE | PROJECT NO |
| | | F.A. DARABI, P.E. | NOV 1993 | 01100-323-01 |
| | | REG. PROJ. ENGINEER | SCALE 1"=50' | DWG. NO. |



2970

LEGEND

- | | | |
|-----------------------------------------------|-----------------|---------------|
| 1. RAW MATERIAL TRANSPORT FROM QUARRY | (002) | 23. CLINKER I |
| 2. RAW MATERIAL STORAGE | (004) | 24. LIMESTONE |
| 3. PORTAL RECLAIMER | (005) | 25. FRESH ME |
| 4. RAW MATERIAL TRANSPORT | (001) | 26. CLINKER J |
| 5. ROLLER MILL EXHAUST BINS | (007, 018, 017) | 27. FRESH ME |
| 6. RAW MATERIAL TRANSPORT TO ROLLER MILL | (040, 041) | 28. CEMENT C |
| 7. PORTAL ANALYZER | (042) | 29. FRESH ME |
| 8. ROLLER MILL | (112) | 30. CEMENT F |
| 9. ROLLER MILL EXHAUST FAN | (118) | 31. CEMENT B |
| 10. ROLLER MILL ELECTROSTATIC PRECIPITATOR | (119) | 32. COAL CAR |
| 11. ESP EXHAUST FAN | (009) | 33. BINDER I |
| 12. RAW STACK | (021) | 34. COAL # 1 |
| 13. ROLLER MILL FAN | (011) | 35. COAL # 2 |
| 14. COOLING TOWER | (010) | 36. COAL STO |
| 15. HOMOGENEOUS BLD & BLOWER ROOM | (001) | 37. RICH ONE |
| 16. ALLEVATOR | (133) | 38. COAL STO |
| 17. PREHEATER AND RICH FEED SYSTEM | (001) | 39. COAL BLD |
| 18. ROTARY MILL | (003) | 40. COAL BLD |
| 19. CLINKER COOLER | (005) | 41. CLAY SHC |
| 20. CLINKER COOLER ELECTROSTATIC PRECIPITATOR | (013) | 42. CLAY FEI |
| 21. COAL MILL FAN | (018) | 43. CLAY TBA |
| 22. ESP EXHAUST FAN | (014) | 44. PORTAL F |
| 23. CLINKER COOLER EXHAUST STACK | (013) | 45. CLAY STO |
| 24. CLINKER TRANSPORT | (01/101) | 46. FRESHONE |
| | | 47. CLAY TBA |
| | | 48. CLAY TBA |



- ICE SILOS (S07)
- CYPRUS STORAGE (S12)
- ROVVE BINS (S06, S10)
- XTIVE TRANSPORT TO FRESH MILL (S13)
- R (S01)
- I BR (S24)
- PORT TO STORAGE SILOS (S02)
- CE SILOS AND TRUCK LOADING W/SCALE (S03)
- ME (S28)
- I (S08)
- ONE UNLOADING (S01)
- ONE TRANSPORT (S03)
- (S07)
- (S04)
- (S16, S11)
- (S15)
- (S17)
- (S18)
- (S11/S15)
- (S13)
- (S16)
- (S14)
- (S17)
- (S01)

PRELIMINARY
04/01/99

| | |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| SUWANNEE AMERICAN CEMENT CO. BRANFORD, FLORIDA | |
| SHEET NUMBER: 0001 PROJECT: SUWANNEE AMERICAN CEMENT CO. BRANFORD, FLORIDA DATE: 11/15/99 | SCALE: NONE DRAWN BY: [Signature] CHECKED BY: [Signature] |
| | SUWANNEE 7400-7153 |

Filey



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 624/98/01

FAX TRANSMITTAL FORM

TO: Cleve Holladay
850 / 922 - 6979

FAX NO. _____
FROM: John Koogler
DATE: 8/14/99 SENT BY: JK

The text being transmitted consists of 8 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: Cleve - excuse the handwritten notes. Hope this is all you need.
JK

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PM10 Point Source Emissions

Kiln Raw Mill @ 0.11 lb/tm preheater feed
$$\text{PM}_{10} = 0.11 \text{ lb/tm} \times 178 \text{ tph} \times 0.126$$
$$= 2.47 \text{ g/sec}$$

Cooler @ 0.06 lb/tm preheater feed
$$\text{PM}_{10} = 0.06 \text{ lb/tm} \times 178 \text{ tph} \times 0.126$$
$$= 1.35 \text{ g/sec}$$

Suwannee American Cement

Fugitive PM₁₀ From Vehicle Traffic

| Vehicle | Round Trips/Day | Distance (mi)* | Weight (tons) | |
|---------------|-----------------|----------------|---------------|--------|
| | | | Empty | Loaded |
| Cement trucks | 112 | 0.62/0.67** | 12.75 | 39.25 |
| Coal trucks | 16 | 0.90 | 14.25 | 39.25 |
| Raw Materials | | | | |
| Clay | 7 | 0.91 | 14.25 | 39.25 |
| Other | 22 | 0.70 | 14.25 | 39.25 |
| Autos | 105 | 0.53 | 1.5 | 1.5 |

* One-way travel distance

** Empty / Loaded

Total PM10 Emissions Vehicle Traffic

$$E = 0.016 (Silt/2)^{0.65} (Wt/3)^{1.5} \quad AP-42$$

$$= 0.016 (0.4/2)^{0.65} \times$$

| | | | |
|---------------------|-----------------------------------------------------|---|----------|
| [Cement loaded: | $(39.25/3)^{1.5} \times 112 \times 0.67 \text{ mi}$ | = | 3551.2 |
| + empty: | $(12.75/3)^{1.5} \times 112 \times 0.62 \text{ mi}$ | = | 608.4 |
| Coal + loaded: | $(39.25/3)^{1.5} \times 16 \times 0.90 \text{ mi}$ | = | 681.5 |
| + empty: | $(14.25/3)^{1.5} \times 16 \times 0.90 \text{ mi}$ | = | 149.1 |
| Materials + loaded: | $(39.25/3)^{1.5} \times 22 \times 0.78 \text{ mi}$ | = | 812.1 |
| + empty: | $(14.25/3)^{1.5} \times 22 \times 0.78 \text{ mi}$ | = | 177.6 |
| Clay + loaded: | $(39.25/3)^{1.5} \times 7 \times 0.91 \text{ mi}$ | = | 301.5 |
| + empty: | $(14.25/3)^{1.5} \times 7 \times 0.91 \text{ mi}$ | = | 65.9 |
| Aufos + in: | $(1.5/3)^{1.5} \times 105 \times 0.53 \text{ mi}$ | = | 19.7 |
| + out: | $(1.5/3)^{1.5} \times 105 \times 0.53 \text{ mi}$ | = | 19.7 |
| | | | <hr/> |
| | | | 6386.6] |

$$= 0.016 (0.4/2)^{0.65} (6386.6) = 35.9 \text{ lb/day}$$

Fugitive PM10 Emission Rates

| Vehicle | Emissions (lb/day) | One-Way Dist (mi) | Travel Hours | Travel Time (hr/day) | Emissions (g/sec) | | |
|------------------|--------------------|-------------------|--------------------------|----------------------|-------------------|---------------|-------------|
| | | | | | 10x10m Source | 20x20m Source | Park Source |
| Cement Loaded | 19.96 | 0.67 | 0500-2100 | 16 | 14.58E-04 | 29.16E-04 | - |
| Empty | 3.42 | 0.62 | 0500-2100 | 16 | 2.70 | 5.40 | - |
| Coal Loaded | 3.83 | 0.90 | 0600-2000 | 14 | 2.38 | 4.76 | - |
| Empty | 0.84 | 0.90 | 0600-2000 | 14 | 0.52 | 1.04 | - |
| Materials Loaded | 4.56 | 0.78 | 0600-2000 | 14 | 3.27 | 6.54 | - |
| Empty | 1.00 | 0.78 | 0600-2000 | 14 | 0.72 | 1.43 | - |
| Clay Loaded | 1.69 | 0.91 | 0600-2000 | 14 | 1.04 | 2.08 | - |
| Empty | 0.37 | 0.91 | 0600-2000 | 14 | 0.23 | 0.46 | - |
| Antes In | 0.11 | 0.53 | {0700-0900 1300-1700} | 6 | 0.27 | 0.16* | 1.22 |
| Out | 0.11 | 0.53 | {2300-0100} | | 0.27 | 0.16* | 1.22 |
| Total | 35.9 | | | | | | |

* 6x16 m source

$$\begin{aligned}
 \text{Emissions (g/s)} &= \text{Emissions (lb/day)} \times 453.6 \text{ g/lb} \times 1/3600 \text{ sec/hr} \\
 &\times 1/\text{Travel Time (hr/d)} \times 1/(\text{Dist (mi)} \times 1609 \text{ m/mi}) \\
 &\times \text{Source dimension (m)}
 \end{aligned}$$

| LINK | AD | BC | C' | BD | DX | XE | EF | FX | EG | DH | HI | HJ |
|-------------------|-----------------------------------|----|----|-------|------------|------|----|----|----|-------|----|----|
| Number of Sources | 69 | 10 | 1 | 12 | 3 | 4 | 3 | 12 | 15 | 20 | 14 | 12 |
| C-C Spacing (m) | 10 | 6 | - | 10 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Hour | SOURCES CONTRIBUTING TO EMISSIONS | | | | | | | | | | | |
| 1 | A | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | CE,CF | 0 | 0 | CE,CF | CE,CF | CE | CF | CF | 0 | 0 | 0 | 0 |
| 7 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 8 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 9 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 10 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 11 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 12 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 13 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 14 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 15 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 16 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 17 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 18 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 19 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 20 | All | 0 | 0 | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 21 | CE,CF | 0 | 0 | CE,CF | CE,CF | CE | CE | CF | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | A | A | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

KEY A - Automobile In and Out
 CE - Cement Empty
 CF - Cement Full
 CL - Clay Empty and Loaded
 CO - Coal Empty and Loaded
 M - Raw Materials (Other than Clay) Empty and Loaded
 0 - No Traffic
 All - All Truck Types

| LINK | AD | BC | C' | BD | DX | XE | EF | FX | EG | DH | HI | HJ |
|-------------------|-----------------------------------|----|----|-------|------------|------|----|----|----|-------|----|----|
| Number of Sources | 69 | 10 | 1 | 12 | 3 | 4 | 3 | 12 | 15 | 20 | 14 | 12 |
| C-C Spacing (m) | 10 | 6 | - | 10 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Hour | SOURCES CONTRIBUTING TO EMISSIONS | | | | | | | | | | | |
| 1 | A | A | A | O | O | O | O | O | O | O | O | O |
| 2 | O | O | O | O | O | O | O | O | O | O | O | O |
| 3 | O | O | O | O | O | O | O | O | O | O | O | O |
| 4 | O | O | O | O | O | O | O | O | O | O | O | O |
| 5 | O | O | O | O | O | O | O | O | O | O | O | O |
| 6 | CE,CF | O | O | CE,CF | CE,CF | CE | CE | CF | O | O | O | O |
| 7 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 8 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 9 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 10 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 11 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 12 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 13 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 14 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 15 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 16 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 17 | A All | A | A | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 18 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 19 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 20 | All | O | O | All | CE,CF M | CE,M | CE | CF | M | CO,CL | CL | CO |
| 21 | CE,CF | O | O | CE,CF | CE,CF | CE | CE | CF | O | O | O | O |
| 22 | O | O | O | O | O | O | O | O | O | O | O | O |
| 23 | O | O | O | O | O | O | O | O | O | O | O | O |
| 24 | A | A | A | O | O | O | O | O | O | O | O | O |

KEY A - Automobile In and Out
 CE - Cement Empty
 CF - Cement Full
 CL - Clay Empty and Loaded
 CO - Coal Empty and Loaded
 M - Raw Materials (Other than Clay) Empty and Loaded
 O - No Traffic
 All - All Truck Types

| LINK | AD | BC | C' | BD | DX | XE | EF | FX | EG | DH | HI | HJ |
|---------------------------------------------------------------------------------------------|-----------------------------------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|-------------|
| Number of Sources | 69 | 10 | 1 | 12 | 3 | 4 | 3 | 12 | 15 | 20 | 14 | 12 |
| C-C Spacing (m) | 10 | 6 | - | 10 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Hour | Emissions (g/s) x 10 ⁴ | | | | | | | | | | | |
| 1 | 0.53 | 0.32 | 2.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 17.29 | 0 | 0 | 17.29 | 34.58 | 5.40 | 5.40 | 29.18 | 0 | 0 | 0 | 0 |
| 7 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 8 | 26.01 | 0.32 | 2.39 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 9 | 26.01 | 0.32 | 2.39 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 10 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 11 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 12 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 13 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 14 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 15 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 16 | 26.01 | 0.32 | 2.39 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 17 | 26.01 | 0.32 | 2.39 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 18 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 19 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 20 | 25.48 | 0 | 0 | 25.48 | 42.53 | 13.40 | 5.40 | 29.18 | 8.00 | 8.38 | 2.54 | 5.84 |
| 21 | 17.29 | 0 | 0 | 17.29 | 34.58 | 5.40 | 5.40 | 29.18 | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | 0.53 | 0.32 | 2.39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total (g/s) | 394.5 | 1.92 | 14.34 | 391.3 | 664.6 | 138.4 | 86.4 | 462.0 | 112.0 | 117.3 | 35.6 | 81.8 |
| Total (lb/day) | 21.60 | 0.015 | 0.011 | 3.73 | 1.58 | 0.63 | 0.21 | 4.45 | 1.33 | 1.86 | 0.40 | 0.78 |
| Total (lb/day) = Total (g/s) x 3600 (s/hr) x no. sources x 1/453.6 (lb/g) x 10 ⁴ | | | | | | | | | | | | |
| | | | | | | | | | | | | 36.5 lb/day |



KOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 024-98-01

FAX TRANSMITTAL FORM

TO: Joe Kuhn

FAX NO. _____

FROM: John Kogler

DATE: 11/12/99 SENT BY: Wendy

The text being transmitted consists of 1 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: _____

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**Emissions from 1000-kw (electric)/Natural-Gas Fired Emergency Generator
Suwannee American Cement Co. Inc.**

| Pollutant | Emission Factor (1) (g/kw-hr) | Emergency Generator (2) Emissions (lb/hr) |
|-----------|----------------------------------|-------------------------------------------------|
| Nox | 3.1 | 8.5 |
| CO | 1.5 | 4.1 |
| VOC(3) | 0.2 | 0.5 |

- (1) From EPA, AP-42, Section 3.2, Table 3.2-7 for 2-cycle lean burn engine with clean burn technology
- (2) Emissions from 1000 kw electric generator unit = (g/kw-hr) x 1000 kw electric x 1.25 engine-to-electric x 1/453.6 g/lb
- (3) Non-methane VOCs

NOTE: Generator exempt from permitting per 62-210.300(3)(a)20 FAC if natural gas use does not exceed 4.4 million cubic feet per year.



KOUGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

PROJECT 024-98-01

File

FAX TRANSMITTAL FORM

TO: *Cleve Holladay*

FAX NO. _____

FROM: *John Kougler*

DATE: *11/2/99* SENT BY: *Wendy*

The text being transmitted consists of 5 page(s) PLUS this one. If you do not receive all of the pages or if there are difficulties with this transmission, please call (352) 377-5822.

REMARKS: _____

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KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

MEMORANDUM

TO: Cleve Holladay

FROM: John Koogler

DATE: November 12, 1999

The attached describes the development of the vehicle generated PM10 emissions inventory for Suwannee American Cement and the basis of the air quality impact analysis.

Call if there are any questions.

Traffic Generated Fugitive Particulate Matter Emissions

The air quality impact of fugitive particulate matter (PM₁₀) generated by vehicle traffic associated with the Suwannee American Cement plant has been assessed. The traffic included in the assessment was the automobile traffic generated by plant employees and the truck traffic required to deliver raw materials to the plant and to transport finish cement from the plant.

The emission rates of fugitive PM₁₀ were calculated using EPA emission factors (EPA Publication AP-42, Section 13.2.1, October 1997). The impact of these emissions on ambient air quality was evaluated using the ISC-ST Air Quality Model (Version 99155); the same air quality model used for evaluating point source emissions from the plant and from off-site sources. The meteorological data used in the model represented the period 1989-1993. The surface meteorological data were from Gainesville, Florida, and the upper air data were from Waycross, Georgia.

The automotive traffic volume was from a report prepared for Suwannee American Cement by Burns Traffic Services, Inc. (undated). This report assumed employment of 100 persons and a traffic volume of 1.05 round trips per person per day. The automotive traffic flow was assumed to occur during a two-hour period in the morning, a two-hour period in the afternoon and a two-hour period at late night (periods of time corresponding to shift changes).

The volume of truck traffic was based on the number of trucks necessary to transport raw materials to the site and to transport finish cement from the site. It was assumed that all of the cement would be transported from the site by WB-50 tanker trucks. The empty weight of these trucks is 25,500 pounds and the loaded weight is 78,500 pounds (26.5 net tons per load). It was estimated that there will be 112 round trips per day, 312 days per year. Cement truck traffic was assumed to arrive at and leave the plant between 0500 and 2100 hours each day (16 hours per day).

Coal and other materials were all assumed to be received at the plant in WB-50 dump trucks. These trucks have an empty weight of 28,500 pounds and a loaded weight of 78,500 pounds (25.0 net tons per load). It was estimated that 127,896 tons per year of coal will be required to fire the kiln 8760 hours per year. This amount of coal will require approximately 16 round trips per day, 312 days per year. It was assumed that coal and other raw materials will be received at the plant between 0600 and 2000 hours each day (14 hours per day).

The raw materials required at the plant include clay, flyash, iron ore, gypsum and various other additives required for finished cement. To be conservative, it was assumed that all clay required for the production of raw meal will be transported to the plant from off-site. It was estimated that 54,000 tons of clay and 167,500

tons of the other raw materials combined will be required per year. Clay was accounted for separately as it will be stored in a different location than the other materials (see attached site plan).

The clay deliveries will require seven round trips per day and the delivery of the other raw materials will require approximately 22 round trips per day, 312 days per year.

The routes used by the various vehicles can be followed on the attached site plan. All traffic will enter the plant property by turning north off of U.S. 27 onto the paved plant access road. All vehicles will travel approximately 0.43 miles north on the plant access road to the plant site. Automobile traffic will enter the paved plant parking area at this point while truck traffic will continue into the plant. The cement trucks will travel to the point on the site plan designated 33; Cement Storage Silos and Truck Loading with Scales. The raw materials trucks (other than clay) will continue to the south end of the storage hall (on the east side of the plant site) to the storage area designated "Other Material/Iron Ore". The trucks delivering clay will proceed to the north end of the plant site to the point designated 44; Clay Feeder/Crusher. Coal trucks will proceed to the center of the plant site to the area designated 38; Coal Storage.

The routes traveled have been designated by roadway links identified by letters (A-B, B-C, etc.). These designations are shown on the attached site plan.

Fugitive PM10 emissions from vehicle traffic were estimated using procedures outlined in Compilation of Air Pollutant Emission Factors, Section 13.2.1, *Paved Roads*, EPA Publication AP-42 (October 1997). The general equation used to determine PM10 emissions was:

$$E \text{ (lb/VMT)} = 0.016 \text{ (silt, \%2)}^{0.65} \text{ (vehicle weight, tons/3)}^{1.5}$$

The silt loading on the paved surfaces of 0.4 grams per square meter was selected from Table 13.2.1-2 of the referenced EPA document for normal conditions and low ADT (Average Daily Traffic) roads. The vehicle weight for loaded and empty trucks is as defined previously. The average automobile weight was estimated to be 1.5 tons.

The emissions generated by vehicle traffic were represented by volume sources in the ISC-ST air quality model. For roadway link A-B and B-D, 10 meter by 10 meter by 5 meter high volume sources located 10 meters center-to-center were used. For roadway link B-C (automobile traffic to parking), volume sources 6 meters by 6 meters by 3 meters high located 6 meters center-to-center were used. The parking area was represented by a single 45 meter by 45 meter by 3 meter high volume source. All other roadway links were represented by 10 meter by 10 meter by 5 meter high volume sources located 20 meters center-to-center.

The total PM10 emissions estimated for all vehicle traffic was 36.0 pounds per day. Scaling factors were used in the air quality model to account for the hours that emissions are actually expected to occur over each roadway link.

The modeling was conducted with point source emissions of PM10 particles, fugitive vehicle traffic generated PM10 emissions from Suwannee American Cement and PM10 emissions from all inventory sources (all assumed to be increment consuming). Modeling results are summarized in the attached table and output files have been transmitted electronically. The data show that the impacts of fugitive PM10 particles generated by vehicle traffic when combined with impacts of point source emissions of PM10 from Suwannee American and off-site sources will not result in exceedences of PSD increments or National Ambient Air Quality Standards for PM10 particles.

INTEROFFICE MEMORANDUM

Date: 12-Nov-1999 09:23am
From: Koogler & Associates
koogler@worldnet.att.net
Dept:
Tel No:

To: Joseph Kahn TAL 850/921-9519 (KAHN_J@dep.state.fl.us)
CC: Cleve Holladay TAL 904/488-1344 (HOLLADAY_C@dep.state.fl.us)

Subject: 5 year data of air modeling for SAC

Here are all five years of modeling data. I apologize for not sending all files originally.

Max Lee

| Name | Size | Modified | Comment |
|--------------|-------------|------------------|----------------|
| SWSO2A91.OUT | 181,958 | 11/11/99 9:18 AM | |
| SWCO_90.OUT | 181,958 | 11/10/99 9:00 PM | |
| SWCO_91.OUT | 182,092 | 11/10/99 9:01 PM | |
| SWCO_92.OUT | 182,092 | 11/10/99 9:03 PM | |
| SWCO_93.OUT | 181,958 | 11/10/99 9:05 PM | |
| SWCO8_89.OUT | 182,092 | 11/10/99 8:49 PM | |
| SWCO8_90.OUT | 181,958 | 11/10/99 8:51 PM | |
| SWCO8_91.OUT | 182,092 | 11/10/99 8:53 PM | |
| SWCO8_92.OUT | 182,092 | 11/10/99 8:54 PM | |
| SWCO8_93.OUT | 181,958 | 11/10/99 8:56 PM | |
| SWNX_90.OUT | 182,092 | 11/10/99 9:17 PM | |
| SWNX_89.OUT | 182,092 | 11/10/99 9:15 PM | |
| SWNX_91.OUT | 182,092 | 11/10/99 9:19 PM | |
| SWNX_92.OUT | 182,092 | 11/10/99 9:20 PM | |
| SWNX_93.OUT | 182,092 | 11/10/99 9:22 PM | |
| SWSO2_89.OUT | 181,958 | 11/10/99 9:07 PM | |
| SWSO2_90.OUT | 181,958 | 11/10/99 9:08 PM | |
| SWSO2_91.OUT | 181,958 | 11/10/99 9:10 PM | |
| SWSO2_92.OUT | 179,338 | 11/10/99 9:12 PM | |
| SWSO2_93.OUT | 181,958 | 11/10/99 9:14 PM | |
| SWSO2A89.OUT | 181,958 | 11/11/99 9:14 AM | |
| SWSO2A90.OUT | 181,958 | 11/11/99 9:16 AM | |
| SWCO_89.OUT | 182,092 | 11/10/99 8:58 PM | |
| SWSO2A92.OUT | 181,958 | 11/11/99 9:32 AM | |
| SWSO2A93.OUT | 181,958 | 11/11/99 9:19 AM | |
| SWPM_89.OUT | 449,746 | 11/11/99 1:17 PM | |
| SWPM_91.OUT | 449,746 | 11/11/99 3:52 PM | |
| SWPM_92.OUT | 449,746 | 11/11/99 5:19 PM | |
| SWPM_93.OUT | 449,746 | 11/11/99 6:38 PM | |
| SWPM_90.OUT | 449,746 | 11/11/99 2:32 PM | |

| Name | Size | Modified | Comment |
|------------------------------|--------|------------------|---------|
| SAC_air_modeling summary.doc | 23,040 | 11/12/99 8:59 AM | |

| Name | Size | Modified | Comment |
|--------------|-------------|-------------------|----------------|
| NXINV_92.OUT | 206,183 | 11/11/99 12:30 AM | |
| NXINV_89.OUT | 206,183 | 11/10/99 10:06 PM | |
| NXINV_91.OUT | 206,183 | 11/10/99 11:42 PM | |
| NXINV_90.OUT | 206,183 | 11/10/99 10:50 PM | |
| NXINV_93.OUT | 206,183 | 11/11/99 1:19 AM | |
| SWPM2_93.OUT | 508,622 | 11/11/99 1:47 AM | |
| SWPM2_92.OUT | 508,622 | 11/10/99 11:47 PM | |
| SWPM2_91.OUT | 508,622 | 11/10/99 9:47 PM | |
| SWPM2_90.OUT | 508,622 | 11/10/99 7:41 PM | |
| SWPM2_89.OUT | 508,622 | 11/11/99 11:58 AM | |

Application Processing Fee

Check one:

Attached - Amount: **\$7500**

Not Applicable.

Construction/Modification Information

| |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Description of Proposed Project or Alterations: The project is the construction of a new Portland cement manufacturing plant. The plant will combine raw materials in a preheater/precalciner kiln with in-line raw mill. The resulting clinker will be interground with gypsum and limestone to produce various types of cement. Cement will be shipped in bulk by truck, and will also be bagged. The primary fuels for the pyroprocessing system will be coal, petroleum coke, and natural gas. Whole tires and/or tire-derived fuel will be used as supplemental fuel. Fabric filter baghouses will control particulate matter emissions from all emission points except the clinker cooler. An ESP will control emissions from the clinker cooler. |
| 2. Projected or Actual Date of Commencement of Construction: Upon FDEP Approval |
| 3. Projected Date of Completion of Construction: Three (3) years after commencement |

Professional Engineer Certification

| |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Professional Engineer Name: Steven C. Cullen, P.E. Registration Number: 45188 |
| 2. Professional Engineer Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 NW 13th Street City: Gainesville State: FL Zip Code: 32609 |
| 3. Professional Engineer Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158 |

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C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Details

| | | |
|----------------------------------------|---------------|--|
| 1. Initial Startup Date: NA | | |
| 2. Long-term Reserve Shutdown Date: NA | | |
| 3. Package Unit: NA | | |
| Manufacturer: | Model Number: | |
| 4. Generator Nameplate Rating: NA | MW | |
| 5. Incinerator Information: NA | | |
| Dwell Temperature: | °F | |
| Dwell Time: | seconds | |
| Incinerator Afterburner Temperature: | °F | |

Emissions Unit Operating Capacity

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1. Maximum Heat Input Rate: NA | mmBtu/hr |
| 2. Maximum Incineration Rate: NA | lb/hr tons/day |
| 3. Maximum Process or Throughput Rate: 178.0 TPH dry feed to preheater | |
| 4. Maximum Production Rate: NA | |
| 5. Operating Capacity Comment (limit to 200 characters): Feed limited to an annual rate of: 163 tph (avg.) x 8760 hrs/yr = 1,427, 150 tpy | |

Emissions Unit Operating Schedule

| | | |
|---------------------------------------|-----------------|-------------------------------|
| Requested Maximum Operating Schedule: | | NOV 12 1999 |
| hours/day | days/week | DEP BUREAU OF AIR REGULATIONS |
| weeks/year | 8760 hours/year | |

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DEP BUREAU OF AIR REGULATIONS

**F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)**

Segment Description and Rate: Segment 1 of 1

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Mineral Products: Cement Manufacturing: Dry Process: Raw Material Transfer | |
| 2. Source Classification Code (SCC): 3-05-006-12 | |
| 3. SCC Units: Tons Processed | |
| 4. Maximum Hourly Rate: 178 | 5. Maximum Annual Rate: 1,427,150 |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: NA | |
| 10. Segment Comment (limit to 200 characters): Raw meal from blend silo: Dry preheater feed | |

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**C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Details

| | | |
|----------------------------------------|---------------|--|
| 1. Initial Startup Date: NA | | |
| 2. Long-term Reserve Shutdown Date: NA | | |
| 3. Package Unit: NA | | |
| Manufacturer: | Model Number: | |
| 4. Generator Nameplate Rating: NA | MW | |
| 5. Incinerator Information: NA | | |
| Dwell Temperature: | °F | |
| Dwell Time: | seconds | |
| Incinerator Afterburner Temperature: | °F | |

Emissions Unit Operating Capacity

| | | |
|-------------------------------------------------------------|--------------|----------|
| 1. Maximum Heat Input Rate: | 364 mmBtu/hr | |
| 2. Maximum Incineration Rate: NA | lb/hr | tons/day |
| 3. Maximum Process or Throughput Rate: NA | | |
| 4. Maximum Production Rate: 2520 tons/day clinker | | |
| 5. Operating Capacity Comment (limit to 200 characters): NA | | |

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Emissions Unit Operating Schedule

| | | |
|---------------------------------------|------------|-----------------|
| Requested Maximum Operating Schedule: | | |
| | hours/day | days/week |
| | weeks/year | 8760 hours/year |

**E. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| 1. Identification of Point on Plot Plan or Flow Diagram: E-21 Stack | |
| 2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 | |
| 3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA | |
| 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA | |
| <p>RECEIVED</p> <p>NOV 12 1999</p> | |
| 5. Discharge Type Code: BUREAU OF AIR REGULATION <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W | |
| 6. Stack Height: | 315 feet |
| 7. Exit Diameter: | 9.42 feet |
| 8. Exit Temperature: (Compound Operation) | 205°F |

F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 1 of 5

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Mineral Products: Cement Manufacturing: Dry Process: Preheater/Precalciner Kiln | |
| 2. Source Classification Code (SCC): 3-05-006-23 | |
| 3. SCC Units: Tons Clinker | |
| 4. Maximum Hourly Rate: 105 (24-hr avg) | 5. Maximum Annual Rate: 839,500 |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: NA | |
| 10. Segment Comment (limit to 200 characters): <p style="text-align: center;">RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION</p> | |

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

Pollutant Detail Information: Pollutant 1 of 7

| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Pollutant Emitted: PM | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 23.14 lb/hour | 92.8 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 0.13 lb/ton of dry preheater feed Reference: BACT | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 178 TPH x 0.13 lb/ton = 23.14 lb/hour 1,427,150 TPY x 0.13 lb/ton = 92.8 tons/year | | |
| <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> <p style="margin: 0;">RECEIVED</p> <p style="margin: 0;">NOV 12 1999</p> <p style="margin: 0;">BUREAU OF AIR REGULATION</p> </div> | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): | | |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Allowable Emissions (Pollutant identified on front of page)

A.

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Basis for Allowable Emissions Code: BACT |
| 2. Future Effective Date of Allowable Emissions: NA |
| 3. Requested Allowable Emissions and Units: 0.13 lb/ton of dry preheater feed |
| 4. Equivalent Allowable Emissions: 23.14 lb/hour 92.8 tons/year |
| 5. Method of Compliance (limit to 60 characters): Method 5 |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): The requested allowable emission rate represents BACT and is more stringent than NSPS/NESHAP. |

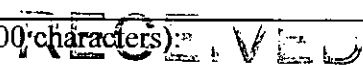
B.

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Basis for Allowable Emissions Code: NA |
| 2. Future Effective Date of Allowable Emissions: |
| 3. Requested Allowable Emissions and Units: |
| 4. Equivalent Allowable Emissions: lb/hr tons/year |
| 5. Method of Compliance (limit to 60 characters): |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): <p style="text-align: right;">RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION</p> |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Pollutant Detail Information: Pollutant 2 of 7

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 19.58 lb/hour | 78.5 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 85% of PM = 0.11 lb/ton of dry preheater feed Reference: BACT | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 178 TPH x 0.11 lb/ton = 19.58 lb/hour 1,427,150 TPY x 0.11 lb/ton = 78.5 tons/year | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters) | | |


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Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Basis for Allowable Emissions Code: BACT | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 0.11 lb/ton of dry preheater feed | | |
| 4. Equivalent Allowable Emissions: | 19.58 lb/hour | 78.5 tons/year |
| 5. Method of Compliance (limit to 60 characters): Method 5 for PM | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): The requested allowable emission rate represents BACT. | | |

B.

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

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Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Pollutant Detail Information: Pollutant 3 of 7

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------|
| 1. Pollutant Emitted: SO2 | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 28.35 lb/hour | 113.3 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 0.27 lb/ton of clinker Reference: BACT | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 105 TPH x 0.27 lb/ton = 28.35 lb/hour 839,500 TPY x 0.27 lb/ton = 113.3 tons/year | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): <p style="text-align: right;">RECEIVED NOV 12 1999 DEPARTMENT OF ENVIRONMENT AND PLANNING BUREAU OF AIR REGULATION</p> | | |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|-----------------------------------------------------------------------------------------------------------------|----------------------|------------------------|
| 1. Basis for Allowable Emissions Code: BACT | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 0.27 lb/ton of clinker | | |
| 4. Equivalent Allowable Emissions: | 28.35 lb/hour | 113.3 tons/year |
| 5. Method of Compliance (limit to 60 characters): CEM | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): | | |

B.

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

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Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Pollutant Detail Information: Pollutant 4 of 7

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|
| 1. Pollutant Emitted: NOX | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 304.5 lb/hour | 1217.3 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 2.9 lb/ton of clinker Reference: BACT | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 105 TPH x 2.9 lb/ton = 304.5 lb/hour 839,500 TPY x 2.9 lb/ton = 1217.3 tons/year <div style="text-align: right; margin-right: 100px;"> <p>RECEIVED</p> <p>NOV 12 1999</p> <p>BUREAU OF AIR REGULATION</p> </div> | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Permittee requests 3.8 lb/ton clinker (399.0 lb/hr & 1595.1 tons/year) during the first two years after startup. | | |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|
| 1. Basis for Allowable Emissions Code: BACT | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 2.9 lb/ton of clinker | | |
| 4. Equivalent Allowable Emissions: | 304.5 lb/hour | 1217.3 tons/year |
| 5. Method of Compliance (limit to 60 characters): CEM | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Permittee requests 3.8 lb/ton clinker (399.0 lb/hr & 1595.1 tons/year) during the first two years after startup. | | |

B.

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|
| 1. Basis for Allowable Emissions Code: NA | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance (limit to 60 characters): | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION | | |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Pollutant Detail Information: Pollutant 5 of 7

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|
| 1. Pollutant Emitted: CO | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 378.0 lb/hour | 1511.1 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 3.6 lb/ton of clinker Reference: BACT (DEP Permit No. PSD-FL-228) | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 105 TPH x 3.6 lb/ton = 378.0 lb/hour 839,500 TPY x 3.6 lb/ton = 1511.1 tons/year <div style="text-align: right; margin-top: 20px;">RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION</div> | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): | | |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|-----------------------------------------------------------------------------------------------------------------|----------------------|-------------------------|
| 1. Basis for Allowable Emissions Code: BACT | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 3.6 lb/ton of clinker | | |
| 4. Equivalent Allowable Emissions: | 378.0 lb/hour | 1511.1 tons/year |
| 5. Method of Compliance (limit to 60 characters): Method 10 | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): | | |

B.

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

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Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Pollutant Detail Information: Pollutant 6 of 7

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|
| 1. Pollutant Emitted: VOC | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 12.6 lb/hour | 50.4 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 0.12 lb/ton of clinker Reference: BACT & AP-42, 5th Edition, Table 11.6-8 | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 105 TPH x 0.12 lb/ton = 12.6 lb/hour 839,500 TPY x 0.12 lb/ton = 50.4 tons/year <div style="text-align: right; font-size: 1.2em; font-weight: bold;">RECEIVED</div> <div style="text-align: right; font-weight: bold;">NOV 12 1999</div> <div style="text-align: right; font-size: 0.8em; font-weight: bold;">BUREAU OF AIR REGULATION</div> | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): | | |

Emissions Unit Information Section 3 of 6 [In-Line Kiln/Raw Mill]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|
| 1. Basis for Allowable Emissions Code: BACT | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 0.12 lb/ton of clinker | | |
| 4. Equivalent Allowable Emissions: | 12.6 lb/hour | 50.4 tons/year |
| 5. Method of Compliance (limit to 60 characters): CEM | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): | | |
| <p>The requested allowable emission rate represents BACT and is more stringent than NESHAP. The proposed MACT limit is 50 ppmvd as propane at 7% O₂. This equates to 49.48 lb/hr and 184.0 tons/year for this facility.</p> <p>The CEM is a requirement of the NESHAP.</p> | | |

B.

| | | |
|-----------------------------------------------------------------------------------------------------------------|--------------|------------------|
| 1. Basis for Allowable Emissions Code: NA | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance (limit to 60 characters): | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): | | |
| <p>NOV 12 1999</p> <p>BUREAU OF AIR REGULATION</p> | | |

**B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)**

Emissions Unit Description and Status

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------|
| 4. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Clinker Cooler | | |
| 2. Emissions Unit Identification Number: <input checked="" type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown | | |
| 3. Emissions Unit Status Code: C | 4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 5. Emissions Unit Major Group SIC Code: 32 |
| 6. Emissions Unit Comment (limit to 500 characters): This emissions unit covers the clinker cooler. | | |

Emissions Unit Control Equipment

A.

| | |
|----------------------------------------------------------------------------|--------------------------------------------------------------|
| 1. Description (limit to 200 characters): Clinker Cooler ESP | <p>RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION</p> |
| 2. Control Device or Method Code: 010 | |

**C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Details

| | | |
|----------------------------------------|---------------|--|
| 1. Initial Startup Date: NA | | |
| 2. Long-term Reserve Shutdown Date: NA | | |
| 3. Package Unit: NA | | |
| Manufacturer: | Model Number: | |
| 4. Generator Nameplate Rating: NA | MW | |
| 5. Incinerator Information: NA | | |
| Dwell Temperature: | °F | |
| Dwell Time: | seconds | |
| Incinerator Afterburner Temperature: | °F | |

Emissions Unit Operating Capacity

| | |
|------------------------------------------------------------------------------------------------------------------|----------------|
| 1. Maximum Heat Input Rate: NA | mmBtu/hr |
| 2. Maximum Incineration Rate: NA | lb/hr tons/day |
| 3. Maximum Process or Throughput Rate: 2520 tons/day of clinker | |
| 4. Maximum Production Rate: NA | |
| 5. Operating Capacity Comment (limit to 200 characters): Annual clinker production limited to 839,500 tpy | |

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Emissions Unit Operating Schedule

| | |
|---------------------------------------|------------------------|
| Requested Maximum Operating Schedule: | |
| hours/day | days/week |
| weeks/year | 8760 hours/year |

**F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)**

Segment Description and Rate: Segment 1 of 1

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Mineral Products: Cement Manufacturing: Dry Process: Clinker Cooler | |
| 2. Source Classification Code (SCC): 3-05-006-14 | |
| 3. SCC Units: Tons Clinker | |
| 4. Maximum Hourly Rate: 105 (24-hr avg) | 5. Maximum Annual Rate: 839,500 |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: NA | |
| 10. Segment Comment (limit to 200 characters): <div style="text-align: right;"> <p>RECEIVED</p> <p>NOV 12 1999</p> <p>BUREAU OF AIR REGULATION</p> </div> | |

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

Pollutant Detail Information: Pollutant 1 of 2

| | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Pollutant Emitted: PM | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 12.46 lb/hour | 50.0 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 0.07 lb/ton of dry preheater feed Reference: BACT | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 178 TPH x 0.07 lb/ton = 12.46 lb/hour 1,427,150 TPY x 0.07 lb/ton = 50.0 tons/year | | |
| <p>RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION</p> | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): | | |

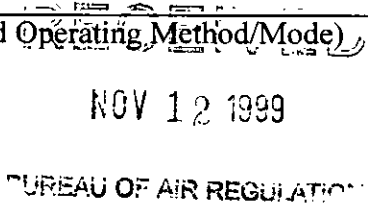
Emissions Unit Information Sectio 4 of 6 [Clinker Cooler]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|-----------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Basis for Allowable Emissions Code: RULE | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 0.07 lb/ton of dry preheater feed | | |
| 4. Equivalent Allowable Emissions: | 12.46 lb/hour | 50.0 tons/year |
| 5. Method of Compliance (limit to 60 characters): Method 5 | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): | | |
| The requested allowable emission rate represents BACT. | | |

B.

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------|
| 1. Basis for Allowable Emissions Code: NA | | |
| 2. Future Effective Date of Allowable Emissions: | | |
| 3. Requested Allowable Emissions and Units: | | |
| 4. Equivalent Allowable Emissions: | lb/hr | tons/year |
| 5. Method of Compliance (limit to 60 characters): | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): | | |
|  <p>NOV 12 1999 BUREAU OF AIR REGULATION</p> | | |

Emissions Unit Information Sectio 4 of 6 [Clinker Cooler]

Pollutant Detail Information: Pollutant 2 of 2

| | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Pollutant Emitted: PM10 | | |
| 2. Total Percent Efficiency of Control: | | % |
| 3. Potential Emissions: | 10.68 lb/hour | 42.8 tons/year |
| 4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| 5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year | | |
| 6. Emission Factor: 85% of PM = 0.06 lb/ton of dry preheater feed Reference: BACT | | |
| 7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 | | |
| 8. Calculation of Emissions (limit to 600 characters): 178 TPH x 0.06 lb/ton = 10.68 lb/hour 1,427,150 TPY x 0.06 lb/ton = 42.8 tons/year <div style="text-align: right; margin-top: 20px;"> RECEIVED NOV 12 1999 BUREAU OF AIR REGULATION </div> | | |
| 9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): | | |

Emissions Unit Information Section 4 of 6 [Clinker Cooler]

Allowable Emissions (Pollutant identified on front of page)

A.

| | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|
| 1. Basis for Allowable Emissions Code: BACT | | |
| 2. Future Effective Date of Allowable Emissions: NA | | |
| 3. Requested Allowable Emissions and Units: 0.06 lb/ton of dry preheater feed | | |
| 4. Equivalent Allowable Emissions: | 10.68 lb/hour | 42.8 tons/year |
| 5. Method of Compliance (limit to 60 characters): Method 5 for PM | | |
| 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): The requested allowable emission rate represents BACT. | | |

B.

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

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**C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Details

| | | |
|----------------------------------------|---------------|--|
| 1. Initial Startup Date: NA | | |
| 2. Long-term Reserve Shutdown Date: NA | | |
| 3. Package Unit: NA | | |
| Manufacturer: | Model Number: | |
| 4. Generator Nameplate Rating: NA | MW | |
| 5. Incinerator Information: NA | | |
| Dwell Temperature: | °F | |
| Dwell Time: | seconds | |
| Incinerator Afterburner Temperature: | °F | |

Emissions Unit Operating Capacity

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 1. Maximum Heat Input Rate: NA | mmBtu/hr |
| 2. Maximum Incineration Rate: NA | lb/hr tons/day |
| 3. Maximum Process or Throughput Rate: NA | |
| 4. Maximum Production Rate: 150 TPH cement from finish mill | |
| 6. Operating Capacity Comment (limit to 200 characters): Annual production rate limited to: 136 tph (avg.) x 8760 hrs/yr = 1,191,360 tpy | |

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Emissions Unit Operating Schedule

| | | | |
|---------------------------------------|------------|--|------------------------|
| Requested Maximum Operating Schedule: | | | |
| | hours/day | | days/week |
| | weeks/year | | 8760 hours/year |

**F. SEGMENT (PROCESS/FUEL) INFORMATION
(Regulated and Unregulated Emissions Units)**

Segment Description and Rate: Segment 1 of 2

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Mineral Products: Cement Manufacturing: Dry Process: Clinker Grinding | |
| 2. Source Classification Code (SCC): 3-05-006-17 | |
| 3. SCC Units: Tons Cement Produced | |
| 4. Maximum Hourly Rate: 150 | 5. Maximum Annual Rate: 1,191,360 |
| 6. Estimated Annual Activity Factor: NA | |
| 7. Maximum Percent Sulfur: NA | 8. Maximum Percent Ash: NA |
| 9. Million Btu per SCC Unit: NA | |
| 10. Segment Comment (limit to 200 characters): This segment is the storage, conveying and finish milling of clinker, gypsum, limestone, grinding aids, and other mineral aggregates into Portland and masonry cements. <div style="text-align: right;"> <p>RECEIVED</p> <p>NOV 12 1999</p> <p>BUREAU OF AIR RES</p> </div> | |

Emissions Unit Information Section 6 of 6 [Coal Processing]

| | |
|---------------------------------------------------------------------|-------|
| 9. Actual Volumetric Flow Rate: See Table | acfm |
| 10. Percent Water Vapor : See Table | % |
| 11. Maximum Dry Standard Flow Rate: See Table | dscfm |
| 12. Nonstack Emission Point Height: NA | feet |
| 13. Emission Point UTM Coordinates: Zone: East (km): North (km): | |
| 14. Emission Point Comment (limit to 200 characters): | |

| | HEIGH FT. | DIAM. FT. | TEMP. °F | ACFM | H2O | DSCFM |
|----------------|--------------|--------------|-------------|--------|------|---------------|
| S-17 | 10 | 3.5 | 150 | 24,000 | 6.5% | 19423 |
| S-21 | 60 | 1.0 | 150 | 3,000 | 2% | 2545 |
| Total = | | | | | | 21,968 |

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BUREAU OF AIR POLLUTION

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

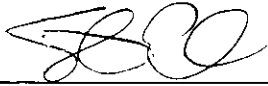
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

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



Signature
(seal)

11/8/99

Date

* Attach any exception to certification statement.

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4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein*, that:

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

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

Signature

(seal)

Date

11/8/99

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* Attach any exception to certification statement.

NOV 12 1999

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

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

Signature _____

(seal)

Date _____

11/8/99

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* Attach any exception to certification statement.

NOV 12 1999

BUREAU OF AIR REGULATION

INTEROFFICE MEMORANDUM

Date: 11-Nov-1999 05:03pm
From: Koogler & Associates
koogler@worldnet.att.net
Dept:
Tel No:

To: Joseph Kahn TAL 850/921-9519 (KAHN_J@dep.state.fl.us)

Subject: SAC application

I have attached the application for Suwannee American Cement (SAC) and modeling results for the class II impacts.

Please note that the modeling output files are those for the years of maximum impact. If you want all five years of output data please email back. As well, if you have other questions please let me know. ph# 352 377-5822

Sincerely,
Max Lee for John Koogler

Name
SUW2.doc

Size Modified
637,440 11/8/99 5:00 PM

Comment

| Name | Size | Modified | Comment |
|---------------------------------------|---------|-------------------|---------|
| Swpm_91_class2.out | 508,622 | 11/10/99 9:47 PM | |
| SAC_airmodeling summary&Generator sum | 215,760 | 11/11/99 4:46 PM | |
| SAC_plot.xls | 79,360 | 11/11/99 4:45 PM | |
| SWNX_89.OUT | 182,092 | 11/10/99 9:15 PM | |
| Swpm_90_class2.out | 508,622 | 11/10/99 7:41 PM | |
| Swnx_90_class2.out | 206,183 | 11/10/99 10:50 PM | |
| Swso2_89_3hr.out | 181,958 | 11/10/99 9:07 PM | |
| SWSO2A89.OUT | 181,958 | 11/11/99 9:14 AM | |
| SWSO2A91.OUT | 181,958 | 11/11/99 9:18 AM | |
| SWCO_91.OUT | 182,092 | 11/10/99 9:01 PM | |

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NOTICE OF ADMINISTRATIVE PROCEEDING
ON PERMIT APPLICATION

NOV 09 1999

BUREAU OF AIR REGULATION

The Department of Environmental Protection gives notice of the receipt of a petition for an administrative proceeding (hearing) on the Department's denial of a permit to Suwannee American Cement Company, Inc., Post Office Box 410, Branford, Florida 32008 in DEP File No. 1210465-001-AC, PSD-FL-259, Branford Plant, Portland Cement Plant, Suwannee County, OGC File No. 99-1125, DOAH Case No. 99-3095, to construct a new dry process, preheater/precalciner type portland cement plant near Branford, to be located at U.S. Highway 27 at County Road 49, Suwannee County. Notice of the intent to deny was published on July 2, 1999.

The administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action and may result in the issuance of a permit as requested by the applicant or as modified in the course of the proceeding or by settlement.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-300.

Petitions filed by any person, other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the notice or receipt of the written notice, whichever occurs first. The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any

person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner, the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) a statement of how and when petitioner received notice of the agency action or proposed action; (d) a statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) a concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

Any party to the permit denial has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, 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 thirty days after this order is filed with the clerk of the Department.

TALI #207274 v1



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 624-98-01

November 8, 1999

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NOV 08 1999

BUREAU OF AIR REGULATION

Mr. Joe Kahn
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Draft Air Construction Permit 1210465-001-AC,
PSD-FL-259
Suwannee American Cement Company
Comments on Draft Permit

Dear Joe:

I appreciated the opportunity to meet with you on October 27, 1999, to discuss the draft air construction permit that has been prepared for the Suwannee American Cement Company (Suwannee American). By this letter, I am providing you with a written copy of our comments and, in some cases, our request for a modification or deletion of permit conditions. The comments are related to the Technical Evaluation and Preliminary Determination, the Best Available Control Technology Determination, and to the draft permit. The subject matter of our comments is referenced by page number and document section number.

First, we request that the maximum hourly rates of the preheater feed, clinker production and finished cement production be increased to account for maximum plant capacity. The annual rates will not change. The maximum rates requested are 178 tons per hour for preheater feed (from 163 tons per hour), 105 tons per hour for clinker production (from 95.83 tons per hour) and 150 tons per hour for finished cement production (from 136 tons per hour). The updated modeling will be submitted under separate cover.

Comments On Technical Evaluation And Preliminary Determination

Page TE-2, Section 1.1 and draft permit page 1 of 50

The authorized representative should be changed to Fred W. Koester, (President, Suwannee American Cement Company, Inc.). A revised authorization page for the permit application is attached.

Page TE-2, Section 2.1

The distance from the plant site to the Chassahowitzka Class I PSD area appears to be incorrect. The correct distance is about 132 kilometers. This appears to be a typographical error. All of the analyses that have been performed to evaluate the impact of the plant on Class I PSD areas were based on correct distances.

Page TE-3, Section 2.3

In the permit application, it was stated that the facility is a major source of Hazardous Air Pollutants (HAPs). This was a presumptive statement based on worst-case expectations of HCl emissions. A determination will be made once the plant is operational as to the actual status of the plant; i.e., either a major source or an area source of HAPs.

Page TE-5, Second paragraph

The fourth sentence of the paragraph should read:

“... mixed with gypsum and limestone and ground in a ball mill in the finish milling”

Page TE-5, Section 3.2, Raw Milling Operations

The emissions from the raw mill and kiln will be controlled by a baghouse rather than an electrostatic precipitator (ESP). The specifications of the baghouse including a performance guarantee comparable to the performance guarantee for the kiln/raw mill ESP are attached. Revised permit application pages will be submitted under separate cover.

Converting from an ESP to a baghouse will have no effect on plant or operating information presented in the permit application. Stack gas flow rates and temperatures will remain unchanged, none of the proposed emission rates from the kiln/raw mill stack (or other stacks) will change and there will be no process changes.

Page TE-6, Section 3.2, Clinker Cooling and Handling

The electrostatic precipitator proposed to control emission from the clinker cooler will not change.

Page TE-8, Section 6.1, Compliance Procedures

All comments related to compliance testing and monitoring will be included in this section even though references to these issues appear at several places in the draft permit document. Comments will be made on PM10 testing on the kiln/raw mill and cooler, the initial compliance testing requirements for emission points controlled by baghouses and the requirement for a carbon monoxide (CO) CEMs.

PM10 Emissions Measurements on Kiln/Raw Mill and Cooler.

It is requested that Suwannee American be given the option to demonstrate compliance with the PM and PM10 emission limits for the kiln/raw mill and cooler by measuring total PM emissions using the EPA Method 5 test procedure and assuming all of the collected particulate matter is PM10. If Suwannee American can demonstrate compliance with both the PM and PM10 emission limits using this approach, there will be no requirement to make separate PM10 emission measurements using EPA Method 201.

This option has been granted to other facilities and should be granted for Suwannee American. The alternative proposed represents no relaxation of permit conditions and actually requires PM emission rates to comply with the more stringent PM10 emission limits for this alternative compliance demonstration to be successful.

Initial Compliance Testing of Emission Points Controlled by Baghouses

There are approximately 20 emission points that are potential sources of PM/PM10 emissions that will be controlled by baghouses. The draft permit requires that initial compliance with the particulate matter emission limiting standard for all of these emission points (0.01 grains per dry standard cubic foot) be demonstrated by an emission test using EPA Method 5. Thereafter,

compliance is to be demonstrated with an opacity standard (five percent opacity, maximum).

The requirement for initial and ongoing compliance demonstrations for emission points controlled by baghouses that are minor sources (i.e., less than 100 tons per year) has typically been met by demonstrating compliance with an opacity standard of five percent or less. This requirement is typical in most permits issued by the Department for Portland cement facilities and other sources of particulate matter.

The real burden of this requirement is not the emission tests themselves but the requirement to provide stack sampling facilities and access to the facilities for the one-time tests. It is estimated that the cost of the compliance testing for the approximate 20 emission points will be in the range of \$40-50,000. The cost of providing stack sampling facilities and access to the emission points has been estimated to be in the range of \$100,000 plus. The cost of providing stack sampling facilities and access is high because many of the baghouses are designed with side vents rather than stacks. To conduct a Method 5 test on these baghouses (17 of the 20) would require the installation of a permanent or temporary stack. The other major element in the cost involves providing access to the emission points that satisfies safety requirements. Many of the emission points are elevated and/or have no adjacent structures upon which suitable access can be built.

In lieu of the initial emission tests on all emission points controlled by baghouse, Suwannee American proposes the following. There are three minor emission points controlled by baghouses that will have stacks. These are Emission Points N-09 and N-12 in the finish mill and Emission Point S-17 in the coal mill. [Emission Point S-17 was to be vented into the clinker cooler stack; however, a design change, that will be addressed in subsequent sections of this correspondence, will result in emission point S-17 being vented through a separate stack.] For these three emission points that will have stacks, Suwannee American proposes to install sampling ports and access to the ports so that initial compliance can be demonstrated by emission measurements in accordance with EPA Method 5. For the remaining approximate 17 emission points controlled by baghouses, all of which are minor sources (less than 100 tons per year), Suwannee American proposes that initial and continuing compliance be demonstrated by visible emissions observations and a five percent opacity standard.

The three emission points that have stacks are the larger emission points (higher air flow rates and hence, higher potential particulate matter emission rates). Suwannee American is of the opinion that initial Method 5 tests on these emission points is reasonable. Suwannee American is of the opinion, however, that the expenditure of \$8,000-9,000 on each of the approximate 17 smaller

Page TE-13, Second table

There is a typographical error in the title of this table. The reference to the "Wolf Island" Class I PSD area should be to the "St. Marks" Class I PSD area.

Page TE-15, Section 8, Additional Requirements

Some of the additional requirements imposed by the permit go beyond what is normally required in air construction permits and are unacceptable to Suwannee American.

Telemetrying CEMs, COMs and Operational Data to FDEP Offices

Suwannee American has discussed a telemetrying system that will transmit CEMs and COMs data to FDEP offices but has never discussed transmitting operational data. The data generated by the CEMs and COMs on the kiln/raw mill and cooler stacks are processed by a computer dedicated to those systems. Suwannee American has agreed to provide the necessary software in the CEMs/COMs computer to make the data available to the Department and to provide the Department access to this computer. It will be the responsibility of the Department to transmit data from the system to any of its offices.

The computer system that contains the process data that is proposed to be transmitted to the Department's offices is the computer system that controls plant operations. For security purposes, Suwannee American cannot agree to provide FDEP or any other party access to this system. The process data that are proposed to be transmitted to FDEP offices (draft permit, page 17, Condition 9) will be recorded at the plant and will be available for Department review. The transmission of the CEMs and COMs data to the Department will provide the Department with the assurance necessary to demonstrate continuing compliance with emission limiting standards without the need for process data.

Requirement for the Manufacturer or Vendor of Control Equipment to Perform Inspections or Maintenance

The proposed requirement for the manufacturer or vendor of the control equipment for the kiln/raw mill and cooler to perform regular inspections, maintenance and repairs is unacceptable to Suwannee American. This requirement goes far beyond what the Department rules require and what has typically been required by the Department at other facilities.

Suwannee American has agreed to transmit CEMs and COMs data to the Department's offices on a continuing basis. These data, and in particular the COMs data, will provide continuing assurance that the kiln/raw mill and cooler

control equipment are functioning properly. Additionally, Suwannee American will agree to develop an Operation and Maintenance Plan that will be implemented by plant personnel for this and other control equipment. Suwannee American will further agree that the plan will be subject to Department review.

Qualifications of the Facility Manager

The proposed permit condition (page 10, Condition 30) that sets forth the qualifications of the facility manager and the time the manager is to spend at the plant is unacceptable to Suwannee American. Suwannee American will employ qualified management and qualified plant operators as would any company investing \$80,000,000-100,000,000 in a facility. To attempt to operate a facility representing such an investment with anything other than qualified management and operators would not be a wise decision and would be and unacceptable to investors in the project. Suwannee American cannot, however, agree to a permit condition that dictates the experience of the facility manager, how and where this experience is to be gained or how much time the manager is to be on site. There is no rule basis for such a requirement.

Page TE-17, Fourth Comment

The comment in general relates to emissions from vehicle traffic associated with the facility. We agree with the Department's comment that vehicle emissions other than fugitive PM10 emissions are not required to be addressed. The fugitive PM10 emissions associated with automotive and truck traffic associated with the plant have been addressed as discussed with the Department. This assessment is provided under separate cover.

Comments on Best Available Control Technology

Page BD-6, Sulfur Dioxide

The Department's assessment of the dry circulating scrubber for SO₂ control assumes that the kiln/raw mill particulate matter control device can be used for reagent recovery. This is not possible as pointed out in our letter to the Department dated April 28, 1999. As a result, the Department's estimated control cost of \$7,400 per ton of SO₂ (while high enough to preclude this system as a viable control option) is too low.

Page BD-8, First paragraph

The reference to the PM10 emission limit on the next to last line of this paragraph should read 0.0085 grains per dry standard cubic foot rather than 0.085 grains per dry standard cubic foot.

BD-8, Second paragraph

It is requested that the last sentence be modified to read:
“Cement trucks leaving the plant”

Page BD-9, Last paragraph

As stated previously, Suwannee American cannot agree to transmit process data to the Department's offices.

Comments on Draft Permit

Page 4, Condition 6

It is requested that the construction permit be valid for a period of three (3) years.

Page 5, Condition 8

The proposed Condition states:

“The owner or operator shall apply for and receive a Title V operating permit ...” [Emphasis added]

The rule citation is 62-213, FAC. Rule 62-213.420, FAC, requires operators to apply for a Title V permit 90 days prior to the expiration of a construction permit, but no later than 180 days after commencement of operation.

Suwannee American will apply for the Title V operating permit 90 days prior to the expiration of the construction permit or no later than 180 days after commencement of construction whichever occurs first, but the company has no control over when the Title V permit will be issued. This being the case,

Suwannee American requests that the phrase and received be removed from Condition 8.

Page 6, Condition 10, Additional Reasonable Precautions

The precaution that requires, "storage piles to be shaped, compacted and oriented to minimize wind erosion" cannot practically be applied at the Suwannee American facility and should be removed from the permit. This requirement is suitable for the storage of large quantities of bulk material in unenclosed areas. At the Suwannee American plant, and as required by the first Additional Reasonable Precaution, the raw materials will be stored under roof or in enclosed vessels. The orientation of materials stored under roof will be dictated by the orientation of the covered storage area. Similarly, the dimensions of the covered storage area will dictate the shape of the storage piles. The requirement to compact the storage material is not practical because of the requirements of the reclamation equipment and/or the high turnover of stored material. It is our professional opinion that the moisture content of the stored material and the partial shield provided by the roofed storage will be more than adequate to minimize the generation of fugitive particulate matter.

It is requested that the last precaution be revised to read:

"Cement trucks leaving the plant"

Page 9, Condition 28

It is our understanding that the ambient PM10 monitor specified by this Condition is a monitor that will continuously measure ambient PM10 concentrations (such as the monitor available through Anderson Instruments, Inc.) rather than a monitor that will operate one day out of every six days. As with the transmission of the CEM and COM system data, Suwannee American will provide telemetry access to the continuous PM10 monitor. Transmitting of data from the monitor will be the responsibility of FDEP.

The sentence beginning at the bottom of page 9 and continuing onto page 10 states:

"New or existing monitoring devices shall be located as designated by the Department."

This requirement is open ended and should be revised. Suwannee American will locate the single continuous ambient PM10 monitor specified in this Condition at a location designated by the Department but does not agree to install other new

monitoring devices. Also, Suwannee American does not agree to relocate the one specified monitor unless it is demonstrated by the Department or by Suwannee American that the initial location of the monitor is defective.

Regarding the location of the PM10 monitor, Suwannee American suggests that the monitor required by this condition be located in Branford. Branford is the population center nearest the plant.

Page 10, Condition 30

As stated previously, the Condition dictating the experience of the facility manager is not acceptable to Suwannee American.

Page 12, Condition 2

There is a typographical error in the note which is part of this Condition. The annual limit should read, "... 1,679,000 tons per year."

Page 13, Condition 7(A)

There is a typographical error in this Condition. The reference to test methods should read, "... 40 CFR 60, Appendix A"

Page 17, Condition 2.A.

A requirement for "... vertical and horizontal guillotine gates and a ram." is overly prescriptive. It is suggested that the Condition specify that the tire feeder shall be designed with a double air lock feed system."

The tire feeder has not yet been designed. Once the design has been finalized, and before installation, the design will be submitted to the Department for review.

Page 17, Condition 5

This Condition states that no air heater shall be installed in the raw mill. An air heater is required for proper plant operations; therefore, this Condition must be modified. The permit application submitted to the Department specifies a ~~35~~² MMBtu per hour oil fired heater associated with the raw mill (Equipment No. E02-01). The information provided indicated that the heater will be fired at an average heat input rate of 15.7 MMBtu per hour during the winter and 7.6 MMBtu per hour during the summer. The heater is not addressed in any more detail in

the permit application as the air and combustion products from the heater pass through the raw mill and then through the equipment controlling emissions from the kiln/raw mill. The air heater is not a separate emission point and emissions, including the gas volume and combustion product, have been accounted for in emissions from the kiln/raw mill stack.

In the final plant design, the air heater has been changed to a natural gas fired heater with the same rating. The gas firing rate to the heater, at maximum capacity, will be 0.031 million cubic feet per hour. This will result in the following approximate air pollutant emission rate based on EPA emission factors for gas fired boilers:

- NO_x - 3.12 pounds per hour or 0.03 pounds per ton of clinker
- CO - 2.62 pounds per hour or 0.03 pounds per ton of clinker
- SO₂ - 0.02 pounds per hour or less than 0.01 pounds per ton of clinker
- VOC - 0.08 pounds per hour or less than 0.01 pounds per ton of clinker

As stated previously, these emissions and the gas volume associated with the heater have already been accounted for in the emission limits that have been established for the kiln/raw mill.

Page 17, Condition 9

As stated previously, Suwannee American cannot, for security purposes, allow access to the computer generating process data through a telemetry system. Suwannee American does agree, as discussed with the Department, to provide the Department with access to the computer system that generates the CEMs and COMs emission data.

The requirement in this Condition that the telemetry system be out of operation at each location for no more than 40 minutes per month is unreasonable. First, Suwannee American has agreed only to provide the Department with access to the CEMs/COMs computer system. The Department will have the responsibility for supplying and maintaining the contact with this system. As a result, Suwannee American will only have control over the fraction of time the CEMs/COMs are on line; and no control over the transmission of data.

Secondly, the requirement for no more than 40 minutes downtime per month is unreasonable regardless of which entity operates the system. This represents an acceptable downtime of only 0.09 percent of the time. It is our understanding that an acceptable downtime for a CEMs or COMs is in the range of 5-10 percent per month based on discussions with suppliers of CEMs and telemetry systems. Suwannee American will accept the responsibility of maintaining the CEMs and

COMs on line a fraction of time that is consistent with the requirements of other facilities statewide.

Page 18, Condition 10

As stated previously, the requirement to have the manufacturer or vendor of control equipment for the kiln/raw mill and clinker cooler to provide regular inspections and maintenance is unacceptable. Suwannee American will prepare a Operation/Maintenance Plan for control equipment and will implement the inspection and maintenance with plant personnel. Additionally, Suwannee American will provide FDEP with real-time access to the CEMs and COMs to verify the operating status of the control equipment.

Page 18, Condition 12

Suwannee American has no objection to this Condition so long as any revision to emission limits be based on data that represents a full range of operating conditions and a representative period of time and that any revised emission limits contain a reasonable margin of safety.

Page 19, Condition 15

The height of the kiln/raw mill stack will be increased from 250 feet to 315 feet above grade. This design change is necessary so that the top of the stack will clear the top of the preheater. Air quality modeling is included as Attachment 4 demonstrating that this modification and other modifications discussed herein will not cause exceedances of applicable PSD limits or air quality standards. A revised page of the permit application reflecting the increased stack height will be provided under separate cover.

Page 20, First Paragraph following Footnote 7

The hourly emission limit for mercury should be deleted from the permit. The basis for establishing a mercury emissions from the plant is a material balance that includes all of the mercury introduced into the pyroprocessing system from raw materials and fuels and the assumption that all of the mercury introduced to the plant is released to the atmosphere. Condition 13 (page 19) states the basis for the mercury emission limit and Condition 27 (page 25) establishes the record keeping necessary for the material balance. Both Conditions 13 and 27 specify that the mercury input to the pyroprocessing system, and hence, the presumed mercury emissions, are based on a rolling 12-month mercury input. As such, the

hourly emission limit established by Condition 15 is inconsistent with other permit requirements and not supported by rule and therefore, should be deleted.

Page 21, Condition 16

Emissions from the coal mill will no longer be discharged through the clinker cooler stack. The details of this modification will be addressed in subsequent comments.

The emission limits for the clinker cooler (Emission Unit 005) will remain unchanged as the BACT determination for the clinker cooler includes no credit for emissions from the coal mill.

Page 22, Condition 18

As stated previously, Suwannee American requests that the requirement for the CO CEMs be deleted from the permit.

Page 23, Condition 18

The installation of the COMs for the clinker cooler will be simplified as the coal mill will no longer be discharged through the clinker cooler stack.

Page 24, Condition 21

The requirement for mercury emission measurements and the reporting requirement for the emission rates of other metals should be deleted from the permit. As discussed previously, mercury limitations are based on the annual input of mercury to the pyroprocessing system as determined by a material balance. There is no rule that would support the requirement for mercury emissions measurement nor for the reporting of the emission rates of other unregulated metals.

As stated previously, Suwannee American requests the option of demonstrating compliance with both the PM and PM10 emission limiting standards by conducting total particulate matter emission measurements using EPA Method 5 and assuming all collected particulate matter is PM10.

The Condition requires separate emission measurements for regulated pollutants under four fuel firing scenarios. It is requested that emission measurements be required only if a fuel firing scenario is used more than 400 hours per year. This

request is consistent with conditions that have been incorporated into other permits issued by the Department.

Page 25, Condition 24

A weigh cell on the deep bucket conveyor transferring clinker from the clinker cooler to the clinker silos will directly measure clinker production thus eliminating the necessity to develop a relationship between clinker production and preheater feed rate.

Page 25, Condition 25

The requirement to maintain records of heat input on a 1-hour rolling average basis, updated every minute, is not practical.

The firing rate of coal, petroleum coke, fuel oil and natural gas will be recorded continuously and could be reported on a 1-hour rolling average updated each minute. The heating value of the fuels, however, will only be determined periodically; with each shipment of coal, petroleum coke and fuel oil and on some periodic schedule by the supplier of natural gas. Calculated heat inputs from these fuels on a rolling 1-hour average, updated every minute, therefore becomes an exercise in arithmetic as minute-by-minute values of fuel heating values are not known.

The other difficulty associated with this requirement is related to heat input from firing tire derived fuel; either as whole tires directly into the pyroprocessing system or as tires into a gasifier. As with the other fuels, the heating value of tires will be determined only periodically. In addition to not having the heating value of tires on a minute-by-minute basis, and unlike other fuels, the tire firing rate on a minute-by-minute basis (either directly to the pyroprocessing system or the gasifier) will not be known.

From a practical standpoint, the determination of heat input to the pyroprocessing system on block-hour basis is reasonable. It is proposed that the block-hourly heat input rate be determined by multiplying the hourly average fuel firing rate (regardless of fuel) by the heating value representative of that fuel. This has typically been the requirement at other cement plants and other fuel burning facilities and is the most practical and meaningful way to report heat input.

Page 25, Condition 27

It is suggested that the sampling of raw materials be conducted at the discharge of the blend silo rather than at the raw mill feed. The raw mill feed consists of several components whereas the material from the blend silo is a blended composite of the feed material actually fed to the pyroprocessing system.

Regarding the frequency of sampling, it is requested that this condition specify sampling as proposed in the draft permit for the first three months of plant operation, one month per quarter thereafter for the first year, and one month per year thereafter. If there is a change in raw materials or fuel, sampling will be conducted for one month following the change. If any of the sampling indicates monthly input rates of mercury to the plant are greater than expected, the sampling schedule of the initial year will be repeated.

Page 49, Condition 3

Emissions from the coal mill (Emission Point S-17) will no longer be discharged through the clinker cooler stack (Stack K-15). The emissions from the coal mill will be discharged through a separate stack serving only the coal mill baghouse. Revised pages of the permit application will be provided under separate cover.

PM/PM10 emissions from the coal mill stack will not exceed 0.01 grains per dry standard cubic foot or 2.06 pounds per hour and 9.0 tons per year.

Air quality modeling is included in Attachment 4^{NOT ATTACHED} demonstrating that the emissions from the coal mill, when discharged through a separate stack, will not cause an exceedance of applicable PSD increments or a violation of ambient air quality standards.

Page 50, Condition 4

The separation of the coal mill and clinker cooler discharges will simplify compliance testing. As proposed previously, Suwannee American will conduct emission measurements for particulate matter on the coal mill stack to demonstrate initial compliance with the particulate matter emission limiting standard of 0.01 grains per dry standard cubic foot and 2.06 pounds per hour. Thereafter, compliance will be demonstrated with visible emissions observations (EPA Method 9) and an opacity standard of five percent.

Compliance with emission and opacity limits for the clinker cooler (page 21, Condition 16) will be demonstrated as required by Condition 21 (page 23).

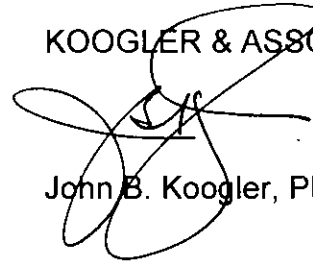
As the coal mill and clinker cooler discharges will be separated (Condition 22, page 24) is no longer required and can be deleted from the permit.

* * * *

I appreciate your review of these comments and will be available to meet with you, should it be necessary, to resolve these matters. Please give me a call with your comments.

Very truly yours,

KOOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.

JBK:wa


C: Mr. Fred Koester
Mr. Charles Yagel
Mr. Frank Darabi
Mr. George Reeves
Mr. Robert Vezina
Mr. Larry Sellars

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NOV 08 1999

Owner/Authorized Representative or Responsible Official

BUREAU OF AIR REGULATION

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name and Title of Owner/Authorized Representative or Responsible Official: Fred W. Koester – President |
| 2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Suwannee American Cement Company, Inc. Street Address: Post Office Box 410 City: Branford State: FL Zip Code: 32008 |
| 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (352) 542-7942 Fax: (352) 542-3417 |
| 4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>11/8/99</u> |

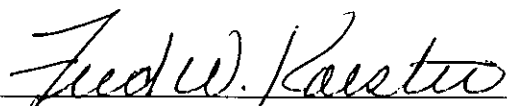
* Attach letter of authorization if not currently on file.

RECEIVED

NOV 08 1999

Owner/Authorized Representative or Responsible Official

BUREAU OF AIR REGULATION

| |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Name and Title of Owner/Authorized Representative or Responsible Official: Fred W. Koester – President |
| 2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Suwannee American Cement Company, Inc. Street Address: Post Office Box 410 City: Branford State: FL Zip Code: 32008 |
| 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (352) 542-7942 Fax: (352) 542-3417 |
| 4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>11/8/99</u> |

* Attach letter of authorization if not currently on file.



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NOV 08 1999

PROPOSAL

BUREAU OF AIR REGULATIONS

TO

KRUPP POLYSIUS CORP.
180 INTERSTATE NORTH PARKWAY
ATLANTA, GA 30339-2194

ATTN: MR. EDWARD R. GRAHAM

FOR

AMERICAN CEMENT
BRANDORD, FLORIDA

INQUIRY NO. 7153-JCL-01

BRANDT FILTRATION GROUP PROPOSAL NO. 1926

August 5, 1999

BRANDT
FILTRATION GROUP
Advanced Air Pollution Control Technology

August 6, 1999

Krupp Polysius Corp.
180 Interstate North Parkway
Atlanta, GA 30339-2194


Attention: Edward R. Graham - Senior Buyer

Bid for: Reverse Air Main Kiln Baghouse
Inquiry # 7153-JCL-01

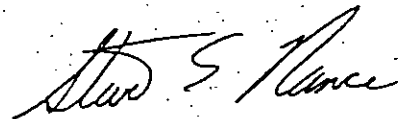
Reference: Brandt Filtration Group Proposal No. 1926

Dear Mr. Graham:

We are pleased to submit this proposal in response to the above listed request for quotation. Pricing for the design and supply of an eight (8) compartment reverse air baghouse complete with structural support steel, access platforms, stairs, ladders, screw conveyors, slide gates, rotary valves, reverse air fan, and ductwork is as follows:


Should you require additional information, please contact me. We look forward to working with you on this very important project.

Yours very truly,
BRANDT FILTRATION GROUP, INC.



Steve E. Nance
Executive Vice President & General Manager

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POLYSIUS CORPORATION

Specification No.

5.0 VENDOR DATA SHEETS MAIN KILN/MILL BAGHOUSE OPTION #2Fabric Filter Design Conditions:Maximum Volume at Operating Conditions 200,000 ACFMTemperature at Operation Conditions 450°F ✓Dust Bulk Density 45 PCF65 PCFGuaranteed Efficiency 99.97%Inlet Dust Loading 20 gr/ACF ✓

Guaranteed Outlet Loading _____

Guaranteed Pressure Drop Across
the Fabric Filter 6" W.G. ✓Air to Cloth Ratio Gross
(~~including air~~) 1.24 : 1Air to Cloth Ratio with One Module Down (w/R.A.) 1.65 : 1Air to Cloth Ratio with Two Modules Down (w/R.A.) 1.93 : 1Reverse-Air Air to Cloth Ratio 1.70 : 1Fabric Filter Arrangement:Model Number 8-1216-35Number of Fabric Filters ONE (1)Construction WELDED C. STEEL PLATENumber of Compartments EIGHT (8)Number of Bags per Compartment 192Total Number of Bags per Fabric Filter 1,536Filter Bag:Media WOVEN FIBERGLASSFinish TEFLON BWeave 3x1

POLYSIUS CORPORATION

Specification No.

| | |
|------------------------------------------------------------|-----------------------------------------------------------|
| Count | <u>44 x 24</u> |
| Weight | <u>15 oz/YD²</u> |
| Dimensions | <u>12" DIA. x 35'-0" ✓</u> |
| Anti-Deflations Rings | <u>SEVEN (7) ✓</u> |
| Cap | <u>CARBON STEEL</u> |
| Connections Top/Bottom | <u>SPRING & CHAIN / SNAP BAND ✓</u> |
| Height of Thimbles | <u>N/A</u> |
| Bag Reach | <u>3 BAG</u> |
| Bag Suspension | <u>DRAW BAR INCREASING RATE SPRING</u> |
| Recommended Tension | <u>65 lbs.</u> |
| <u>Casing and Hoppers:</u> | |
| Casing Material and Thickness | <u>A-36 , 3/16"</u> |
| Casing Design Pressure | <u>± 25" W.G.</u> |
| Compartment Access Door Quantity & Size | <u>FOUR (4) 24" W. x 60" H.</u> |
| Quantity of Hoppers | <u>EIGHT (8)</u> |
| Type of Hoppers | <u>TROUGH</u> |
| Hopper Material and Thickness | <u>A-36 , 3/16"</u> |
| Hopper Valley Angle | <u>52° MIN.</u> |
| Hopper Internal Gas Distribution and Reentrainment Devices | <u>YES</u> |
| Total Hopper Volume | <u>1,811 FT³ / HOPPER</u> |
| Hopper Accessories (per hopper) | <u>(2) HINGED MANWAYS</u> <u>(1) DUST LEVEL SENSOR</u> |
| <u>Fabric Filter Cleaning System:</u> | |
| Method of Cleaning | <u>REVERSE AIR FAN</u> |
| Assistance | <u>NONE</u> |
| Number of Reverse-Air Fans | <u>ONE (1)</u> |

| | |
|-------------------------------------------------|------------------------------------------|
| Standby Fan Included | <u>NO</u> |
| Type of Fan | <u>INDUSTRIAL CENTRIFUGAL EXHAUSTER</u> |
| Type of Blades | <u>RADIAL TIP</u> ✓ |
| Type Drive | <u>V-BELT</u> ✓ |
| H.P. of Drive Motor | <u>100 HP.</u> ✓ |
| Manufacturer of Fan | <u>TWIN CITY OR EQUAL</u> |
| Design Volume of Fan | <u>34,403 ACFM</u> ✓ |
| Reverse-Air Ductwork | <u>A-36, 3/16" TH.</u> |
| Diameter of Reverse-Air Ductwork | <u>40" I.DIA.</u> ✓ |
| Number of Compartment Reverse-Air Poppet Valves | <u>ONE (1) PER COMP'T.</u> ✓ |
| Type Valve | <u>POPPET DISK</u> ✓ |
| Diameter of Reverse-Air Valves | <u>44" DIA.</u> |
| Actuation of Reverse-Air Valves | <u>5" DIA. PNEU. CYL.</u> ✓ |
| Control of Reverse-Air Valves | <u>120V. 4WAY, 2 POSITION SOL. VALVE</u> |
| Manual Lockout | <u>YES</u> |
| Number of Compartment Outlet Poppet Valves | <u>ONE (1) PER COMP'T.</u> ✓ |
| Type Valve | <u>POPPET DISK</u> ✓ |
| Diameter of Outlet Valves | <u>50" DIA.</u> |
| Actuation of Outlet Valves | <u>6" DIA. PNEU. CYL.</u> ✓ |
| Control of Outlet Valves | <u>120V. 4WAY, 2 POSITION SOL. VALVE</u> |
| Manual Lockout | <u>YES</u> |
| Number of Compartment Inlet Valves | <u>ONE (1) PER COMP'T.</u> ✓ |
| Type Valve | <u>BUTTERFLY</u> ✓ |
| Size of Inlet Valve | <u>3' x 8'</u> |
| Actuation of Inlet Valves | <u>5" DIA. PNEU. CYL.</u> ✓ |

POLYSIUS CORPORATION

Specification No.

| | | |
|---------------------------------------------------|---|------------------------------------------------------------------------------------------------------------------------|
| Control of Outlet Valves | | <u>120V. 4WAY, 2 POSITION SOL. VALVE</u> |
| Manual Lockout | | <u>YES</u> |
| <u>Fabric Filter Control System:</u> | | |
| Type of Controller | | <u>ALLEN BRADLEY</u> |
| Instrumentation | | <u>PHOTOHELIC INLET/OUTLET ✓</u> " EACH COMPARTMENT <u>SPEED SWITCH EACH SCREW COMP.</u> " " " ROTARY VALVE. |
| Motor Starters/Control Centers | | <u>NO</u> |
| Power Distribution Panels | | <u>NO</u> |
| <u>Dust Conveyor System:</u> | | <u>rotary valve ?</u> |
| Quantity and Size of Screw Conveyors and Location | 8 | <u>1/10" DIA. HOPPER SCREW W/ 5HP MOTOR</u> |
| | 2 | <u>16" DIA. GATHER-UP SCREW W/ 25HP MOTOR</u> |
| | 1 | <u>16" DIA. CROSSOVER SCREW W/ 25HP MOTOR</u> |
| Design Conveyor Loading | | <u>100% @ 65 PCF FOR HP. CALCS.</u> |
| Screw Speed and Motor HP | | <u>(SEE ABOVE)</u> |
| <u>Summary:</u> | | |
| Over All Dimensions | | <u>54' W. X 74' L. X 70' H.</u> |
| Total Weights (W/O INSULATION) | | |
| Housing and Hoppers | | <u>440,300 lbs</u> |
| Duct Work (REVERSE AIR) | | <u>16,200 lbs</u> |
| Bags | | <u>18,500 lbs</u> |
| Accessories | | <u>10,000 lbs</u> |
| Total | | <u>485,000 lbs ✓</u> |
| Total Field Welding, Feet | | <u>APPROX 7,800 L.F.</u> |
| Thermal Insulation, Thickness | | <u>FIBERGLASS, 4" TH.</u> |
| Total Area, Ft. ² | | <u>32,900 FT²</u> |
| <u>SURFACE PREP. AND PAINTING</u> | | <u>STRUCT. STEEL. SSPC-SP6</u> <u>EXT. PLATE SURFACE</u> <u>SSPC-SP3, BOTH INDUSTRIAL</u> <u>SHOP PRIMER.</u> |

GUARANTEES AND WARRANTIES

PERFORMANCE GUARANTEES

Any contract resulting from this proposal, or the inquiry to which this proposal responds, must include the following clauses:

THE WARRANTIES AND GUARANTEES IN THIS SECTION ARE IN LIEU OF ALL OTHER WARRANTIES AND GUARANTEES OR OTHER STANDARDS OR REQUIREMENTS OF PERFORMANCE OR QUALITY EXPRESS, STATUTORY, AND IMPLIED.

PARTICULATE EMISSION GUARANTEES

Brandt Filtration guarantees that the proposed equipment will limit solid particulate emissions, to a maximum outlet loading of .007 g/DSCF at the specified operating conditions of flue gas volume, inlet load temperature, pressure and particulate composition.

PRESSURE DROP GUARANTEES

Brandt Filtration guarantees that the baghouse pressure drop will not exceed .6" w.g. when operated at the DESIGN CONDITIONS.

FILTER BAG WARRANTY

Brandt Filtration will provide a minimum bag life warranty as follows:

Brand Filtration will replace, without charge, bags found to be defective under normal and proper use within the first thirty-six (36) months from the date of initial operation of the fabric filter equipment.

Deterioration occasioned by damage from moisture, acid attack, or caused by misuse, or excessive heat shall not constitute defects. This warranty is exclusive of all costs related to removal or reinstallation of the existing equipment and installation of the replacement bags which shall be borne by the Purchaser.

All failed bags must be either returned to Brandt Filtration (F.O. B. Norcross, Georgia) or kept for inspection at the plant by Brandt Filtration personnel. Each bag shall be identified by compartment and location within the compartment. All operating and maintenance records are to be made available to Brandt Filtration upon request.

BRANDT
FILTRATION GROUP

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NOV 08 1999

BUREAU OF AIR REGULATION

PROPOSAL

TO

KRUPP POLYSIUS CORP.
180 INTERSTATE NORTH PARKWAY
ATLANTA, GA 30339-2194

ATTN: MR. EDWARD R. GRAHAM

FOR

AMERICAN CEMENT
BRANDORD, FLORIDA

INQUIRY NO. 7153-JCL-01

BRANDT FILTRATION GROUP PROPOSAL NO. 1926

August 5, 1999

BRANDT
FILTRATION GROUP
Advanced Air Pollution Control Technology

August 6, 1999

Krupp Polysius Corp.
180 Interstate North Parkway
Atlanta, GA 30339-2194

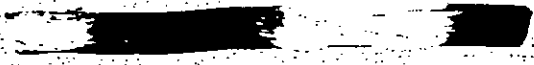
Attention: Edward R. Graham - Senior Buyer

Bid for: Reverse Air Main Kiln Baghouse
Inquiry # 7153-JCL-01

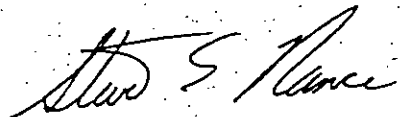
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Should you require additional information, please contact me. We look forward to working with you on this very important project.

Yours very truly,
BRANDT FILTRATION GROUP, INC.



Steve E. Nance
Executive Vice President & General Manager

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POLYSIUS CORPORATION

Specification No.

5.0 VENDOR DATA SHEETS MAIN KILN/MILL BAGHOUSE OPTION #2Fabric Filter Design Conditions:Maximum Volume at Operating Conditions 200,000 ACFMTemperature at Operation Conditions 450°F ✓Dust Bulk Density 45 PCF65 PCFGuaranteed Efficiency 99.97%Inlet Dust Loading 20 gr/ACF ✓

Guaranteed Outlet Loading _____

Guaranteed Pressure Drop Across
the Fabric Filter 6" W.G. ✓Air to Cloth Ratio Gross
(~~including air~~) 1.24 : 1Air to Cloth Ratio with One Module Down (w/RA) 1.65 : 1Air to Cloth Ratio with Two Modules Down (w/RA) 1.93 : 1Reverse-Air Air to Cloth Ratio 1.70 : 1Fabric Filter Arrangement:Model Number 8-1216-35Number of Fabric Filters ONE (1)Construction WELDED C. STEEL PLATENumber of Compartments EIGHT (8)Number of Bags per Compartment 192Total Number of Bags per Fabric Filter 1,536Filter Bag:Media WOVEN FIBERGLASSFinish TEFLON BWeave 3x1

POLYSIUS CORPORATION

Specification No.

Count

44 x 24

Weight

15 oz/YD²

Dimensions

12" DIA. x 35'-0" ✓

Anti-Deflations Rings

SEVEN (7) ✓

Cap

CARBON STEEL

Connections Top/Bottom

SPRING & CHAIN / SNAP BAND ✓

Height of Thimbles

N/A

Bag Reach

3 BAG

Bag Suspension

DRAW BAR INCREASING RATE SPRING

Recommended Tension

65 lbs.

Casing and Hoppers:

Casing Material and Thickness

A-36, 3/16"

Casing Design Pressure

± 25" W.G.

Compartment Access Door Quantity & Size

FOUR (4) 24" W. x 60" H.

Quantity of Hoppers

EIGHT (8)

Type of Hoppers

TROUGH

Hopper Material and Thickness

A-36, 3/16"

Hopper Valley Angle

52° MIN.

Hopper Internal Gas Distribution and Reentrainment Devices

YES

Total Hopper Volume

1,811 FT³ / HOPPER

Hopper Accessories (per hopper)

(2) HINGED MANWAYS
(1) DUST LEVEL SENSOR

Fabric Filter Cleaning System:

Method of Cleaning

REVERSE AIR FAN

Assistance

NONE

Number of Reverse-Air Fans

ONE (1)

| | |
|-------------------------------------------------|------------------------------------------|
| Standby Fan Included | <u>NO</u> |
| Type of Fan | <u>INDUSTRIAL CENTRIFUGAL EXHAUSTER</u> |
| Type of Blades | <u>RADIAL TIP</u> |
| Type Drive | <u>V-BELT</u> |
| H.P. of Drive Motor | <u>100 HP.</u> |
| Manufacturer of Fan | <u>TWIN CITY OR EQUAL</u> |
| Design Volume of Fan | <u>34,403 ACFM</u> |
| Reverse-Air Ductwork | <u>A-36, 3/16" TK.</u> |
| Diameter of Reverse-Air Ductwork | <u>40" I.DIA.</u> |
| Number of Compartment Reverse-Air Poppet Valves | <u>ONE (1) PER COMP'T.</u> |
| Type Valve | <u>POPPET DISK</u> |
| Diameter of Reverse-Air Valves | <u>44" DIA.</u> |
| Actuation of Reverse-Air Valves | <u>5" DIA. PNEU. CYL.</u> |
| Control of Reverse-Air Valves | <u>120V. 4WAY, 2 POSITION SOL. VALVE</u> |
| Manual Lockout | <u>YES</u> |
| Number of Compartment Outlet Poppet Valves | <u>ONE (1) PER COMP'T.</u> |
| Type Valve | <u>POPPET DISK</u> |
| Diameter of Outlet Valves | <u>50" DIA.</u> |
| Actuation of Outlet Valves | <u>6" DIA. PNEU. CYL.</u> |
| Control of Outlet Valves | <u>120V. 4WAY, 2 POSITION SOL. VALVE</u> |
| Manual Lockout | <u>YES</u> |
| Number of Compartment Inlet Valves | <u>ONE (1) PER COMP'T.</u> |
| Type Valve | <u>BUTTERFLY</u> |
| Size of Inlet Valve | <u>3' x 8'</u> |
| Actuation of Inlet Valves | <u>5" DIA. PNEU. CYL.</u> |

POLYSIUS CORPORATION

Specification No.

| | | |
|---------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------|
| Control of Outlet Valves | | <u>120V, 4WAY, 2 POSITION SOL. VALVE</u> |
| Manual Lockout | | <u>YES</u> |
| <u>Fabric Filter Control System:</u> | | |
| Type of Controller | | <u>ALLEN BRADLEY</u> |
| Instrumentation | | <u>PHOTOHELIC INLET/ OUTLET ✓</u> <u>" EACH COMPARTMENT</u> <u>SPEED SWITCH EACH SCREW CONV.</u> <u>" " " ROTARY VALVE.</u> |
| Motor Starters/Control Centers | | <u>NO</u> |
| Power Distribution Panels | | <u>NO</u> |
| <u>Dust Conveyor System:</u> | | <u>Rotary valve ?</u> |
| Quantity and Size of Screw Conveyors and Location | 8 | <u>✓ 10" DIA. HOPPER SCREW w/ 5HP MOTOR</u> |
| | 2 | <u>16" DIA. GATHER-UP SCREW w/ 25HP MOTOR</u> |
| | 1 | <u>16" DIA. CROSSOVER SCREW w/ 25HP MOTOR</u> |
| Design Conveyor Loading | | <u>100% @ 65 PCF FOR HP. CALC'S.</u> |
| Screw Speed and Motor HP | | <u>(SEE ABOVE)</u> |
| <u>Summary:</u> | | |
| Over All Dimensions | | <u>54' W. x 74' L. x 70' H.</u> |
| Total Weights (W/O INSULATION) | | |
| Housing and Hoppers | | <u>440,300 lbs</u> |
| Duct Work (REVERSE AIR) | | <u>16,200 lbs</u> |
| Bags | | <u>18,500 lbs</u> |
| Accessories | | <u>10,000 lbs</u> |
| Total | | <u>485,000 lbs ✓</u> |
| Total Field Welding, Feet | | <u>APPROX 7,800 L.F.</u> |
| Thermal Insulation, Thickness | | <u>FIBERGLASS, 4" TH.</u> |
| Total Area, Ft. ² | | <u>32,900 FT²</u> |
| <u>SURFACE PREP. AND PAINTING</u> | | <u>STRUCT. STEEL. SSPC-SP6</u> <u>EXT. PLATE SURFACE</u> <u>SSPC-SP3, BOTH INDUSTRIAL</u> <u>SHOP PRIMER.</u> |

GUARANTEES AND WARRANTIES

PERFORMANCE GUARANTEES

Any contract resulting from this proposal, or the inquiry to which this proposal responds, must include the following clauses:

THE WARRANTIES AND GUARANTEES IN THIS SECTION ARE IN LIEU OF ALL OTHER WARRANTIES AND GUARANTEES OR OTHER STANDARDS OR REQUIREMENTS OF PERFORMANCE OR QUALITY EXPRESS, STATUTORY, AND IMPLIED.

PARTICULATE EMISSION GUARANTEES

Brandt Filtration guarantees that the proposed equipment will limit solid particulate emissions, to a maximum outlet loading of .007 g/DSCF at the specified operating conditions of flue gas volume, inlet load temperature, pressure and particulate composition.

PRESSURE DROP GUARANTEES

Brandt Filtration guarantees that the baghouse pressure drop will not exceed .6" w.g. when operated at the DESIGN CONDITIONS.

FILTER BAG WARRANTY

Brandt Filtration will provide a minimum bag life warranty as follows:

Brand Filtration will replace, without charge, bags found to be defective under normal and proper use within the first thirty-six (36) months from the date of initial operation of the fabric filter equipment.

Deterioration occasioned by damage from moisture, acid attack, or caused by misuse, or excessive heat shall not constitute defects. This warranty is exclusive of all costs related to removal or reinstallation of the existing equipment and installation of the replacement bags which shall be borne by the Purchaser.

All failed bags must be either returned to Brandt Filtration (F.O. B. Norcross, Georgia) or kept for inspection at the plant by Brandt Filtration personnel. Each bag shall be identified by compartment and location within the compartment. All operating and maintenance records are to be made available to Brandt Filtration upon request.

Date 8-5-99

AUDIO/VIDEO SERVICES ORDER

11444

Joseph Kahn R. 721-9519

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------|
| Tallahassee Camera & Image Center <input checked="" type="checkbox"/> 2880 Apalachee Pkwy. Tallahassee, FL 32301 (850) 877-1152 <input type="checkbox"/> 2011 N. Monroe 553-9434 | Customer Name Chris Bryant | Daytime Phone 521-0700 |
| | Street Address 301 S. Brown St. | Evening Phone |
| | City Tallahassee, FL State FL Zip 32301 | Ready By 8-10-99 12noon |

VIDEO TRANSFER SERVICES (SKU 0030)

| Reels/Slides/Prints | Estimate | Actual | Price@ | Estimate Total | Actual Total |
|----------------------------|---------------|---------------|------------------|----------------|--------------|
| _____ Rolls 8mm Film | _____ ft. | _____ ft. | \$ _____ /ft. | \$ <u>28</u> | \$ _____ |
| _____ Rolls Super 8mm Film | _____ ft. | _____ ft. | \$ _____ /ft. | \$ _____ | \$ _____ |
| _____ Rolls 16mm Film | _____ ft. | _____ ft. | \$ _____ /ft. | \$ _____ | \$ _____ |
| 35mm Slides | _____ slides | _____ slides | \$ _____ /slide | \$ _____ | \$ _____ |
| Prints | _____ prints | _____ prints | \$ _____ /print | \$ _____ | \$ _____ |
| Background Music | _____ hours | _____ hours | \$ _____ /½ hr. | \$ _____ | \$ _____ |
| Splices | _____ splices | _____ splices | \$ _____ /splice | \$ _____ | \$ _____ |
| Titles | _____ titles | _____ titles | \$ _____ /title | \$ _____ | \$ _____ |
| Reels Rewinding | _____ reels | _____ reels | \$ _____ /reel | \$ _____ | \$ _____ |

Custom AV Editing 0029 Est. Hrs: _____ Actual Hrs. _____ \$ _____ ½ hr. \$ _____

TITLE _____ \$ _____ \$ _____

(Use Back for Additional Titles)

AUDIO/VIDEO DUBBING SERVICES

| Original Type | # of Tapes | Tape Length | Dub To / Quantity | SKU | Unit Price | Total |
|----------------------------------|------------|---------------|-------------------|-----|--------------|----------|
| VHS <u>9</u> VHS 8mm Hi 8m VHS-C | <u>2</u> | <u>120min</u> | | | \$ _____ ea. | \$ _____ |
| Other | | | | | \$ _____ ea. | \$ _____ |
| | | | | | \$ _____ ea. | \$ _____ |

AUDIO/VIDEO TAPES

| Tape Description | Tape Length | SKU | Quantity | Unit Price | Total |
|------------------|-------------|-----|----------|--------------|----------|
| | | | | \$ _____ ea. | \$ _____ |
| | | | | \$ _____ ea. | \$ _____ |
| | | | | \$ _____ ea. | \$ _____ |

make 1 copy of each videotape.
 originals belong to Joseph Kahn.
 Christopher Bryant get the copies.

Copy in Any Order Copy in Sequence

SUB TOTAL \$ _____

\$ _____ ea. \$ _____

\$ _____ ea. \$ _____

\$ _____ ea. \$ _____

\$ _____ ea. \$ _____

\$ _____ ea. \$ _____

CUSTOMER RECEIPT AND LIMIT OF LIABILITY NOTICE

Submitting any video tape, film, print, or negative to this firm for processing, printing, or other handling, constitutes an agreement by you that any damages or loss by our company, subsidiary or agents, even though due to the negligence or other fault of our company, subsidiary or agents, will only entitle you to replacement with a like amount of unexposed film and processing or video tape. Except for such replacement, the acceptance of the video tape, film, print, slide, or negative is without other warranty of liability, and recovery for any incidental or consequential damages is excluded. Not responsible for material left over 90 days.

I understand that I am the sole owner of the photographs, negatives, video and music or have received permission from the author to duplicate. I assume total responsibility for any copyright hereof. This agreement constitutes a non-refundable contract for services rendered. Tallahassee Camera and Image will do the best possible job with the submitted material. No deposits or submitted material may be returned without payment in full.

X _____
 Customer's Signature

LAW OFFICES

OERTEL, HOFFMAN, FERNANDEZ & COLE, P.A.

301 S. BRONOUGH ST., 5TH FL.
POST OFFICE BOX 1110 (ZIP 32302-1110)
TALLAHASSEE, FLORIDA 32301

(850) 521-0700
FAX (850) 521-0720

F A C S I M I L E C O V E R S H E E T

DATE: 8/4/99

CLIENT NO. _____

TO: Joseph Dahn

FAX NO. 902-6979

FROM: Chris Bryant

3 pages (including cover sheet) are being transmitted for the following reason(s):

Hard copy will be sent:
 Via regular mail
 Via overnight mail
 Via facsimile only

- As we discussed
- As requested
- For your information
- For your comments
- For your approval

Document Description: 8/4/99 Letter Re: Video Tape Copies

COMMENTS: _____

DROPPED OFF ORIGINALS 8/5/99
READY BY 8/10/99 SHERYL HARTZEL

This facsimile message may contain privileged and confidential information intended only for the individual named above. If the reader of this message is not the intended recipient, or the agent responsible to deliver it to the intended recipient, you are hereby notified that any review, dissemination, distribution, or copying of this communication is prohibited. If this communication was received in error, please immediately notify us by telephone and return the original message to us at the address above.

LAW OFFICES

OERTEL, HOFFMAN, FERNANDEZ & COLE, P.A.

TIMOTHY P. ATKINSON
JEFFREY BROWN
M. CHRISTOPHER BRYANT
C. ANTHONY CLEVELAND
TERRY COLE
SEGUNDO J. FERNANDEZ
DANIEL W. HARTMAN
KENNETH F. HOFFMAN
KENNETH G. OERTEL
PATRICIA A. RENOVITCH

301 SOUTH BRONOUGH STREET
SUITE 500
TALLAHASSEE, FLORIDA 32301

(850) 521-0700
FAX (850) 521-0720

MAILING ADDRESS:
POST OFFICE BOX 1110
TALLAHASSEE, FLORIDA 32302-1110

<http://www.ohfc.com>

VIA FACSIMILE
922-6979

August 4, 1999

Mr. Joseph Kahn, P.E.
New Source Review Section
Division of Air Resources Management
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Re: Suwannee American Cement Company, Inc.
DEP File No. 1210465-001-AC (PSD-FL-259)
Copies of Video Tapes From Permitting File

Dear Joe:

To follow up on your telephone call to me on Monday, August 2, I have contacted Tallahassee Camera Center at 2880 Apalachee Parkway (phone number 877-1152) about copying the video tapes that are in the Department's permitting file. They have indicated that they will do so on their own tapes, and will charge me the costs of the tape and the reproduction.

You had indicated that the best way to handle this would be for you or someone else from the Department to drop the originals off at Tallahassee Camera Center, and to pick them up when the copying is completed, so as to avoid any questions about custody, security, and integrity of the originals. I am in complete agreement that that is the best way to handle it.


Please arrange to have someone from the Department drop the tapes off at Tallahassee Camera Center. They have informed me that it may be as much as a two-day turn-around time to duplicate the tapes. You can either have Tallahassee Camera notify me directly when the copies are ready, or have them notify you and I will await hearing from you in that situation.

Mr. Joseph Kahn, P.E.
August 4, 1999
Page

In addition to the charges from Tallahassee Camera Center, if there are any clerical or personnel charges levied by the Department for arranging for this, Suwannee American and this firm agree to pay any such reasonable charges.

Thank you for your assistance. If you have any questions, please give me a call.

Sincerely,



M. Christopher Bryant

MCB/dg
Kahn8-4-99.Ltr

cc: Jack Chisolm, DEP Deputy General Counsel

OERTEL, HOFFMAN, FERNANDEZ & COLE, P.A.

301 SOUTH BRONOUGH STREET
SUITE 500
TALLAHASSEE, FLORIDA 32301

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KENNETH G. OERTEL
PATRICIA A. RENOVITCH

RECEIVED

AUG 05 1999

BUREAU OF AIR REGULATION

VIA FACSIMILE
922-6979

August 4, 1999

Mr. Joseph Kahn, P.E.
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Division of Air Resources Management
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

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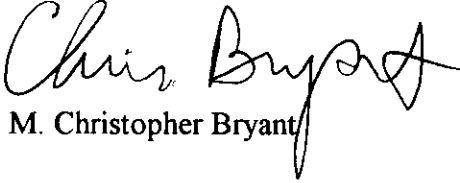
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M. Christopher Bryant

MCB/dg
Kahn8-4-99.Ltr

xc: Jack Chisolm, DEP Deputy General Counsel