



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

RECEIVED
FEB 24 2003
BUREAU OF AIR REGULATION

Identification of Facility

1. Facility Owner/Company Name: Suwannee American Cement	
2. Site Name: Branford Cement Plant	
3. Facility Identification Number: 1210465 <input type="checkbox"/> Unknown	
4. Facility Location: Street Address or Other Locator: 5117 U.S. Highway 27 City: Branford County: Suwannee Zip Code: 32008	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Name and Title of Application Contact: Steven C. Cullen, PE Senior Project Engineer	
2. Application Contact Mailing Address: Organization/Firm: Koogler & Associates Street Address: 4014 NW 13th Street City: Gainesville State: Florida Zip Code: 32609	
3. Application Contact Telephone Numbers: Telephone: (352) 377-5822 Fax: (352) 377-7158	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	2/24/03
2. Permit Number:	1210465-004-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

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

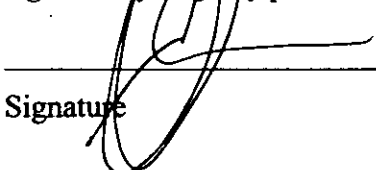
- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
Current construction permit number: _____
- Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.
Current construction permit number: _____
Operation permit number to be revised: _____
- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)
Operation permit number to be revised/corrected: _____
- Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.
Operation permit number to be revised: _____
Reason for revision: _____

Air Construction Permit Application

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

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Celso A. Martini: Plant Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Suwannee American Cement Street Address: Post Office Box 410 City: Branford State: Florida Zip Code: 32008
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (386) 935-0966 Fax: (386) 935-1155
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [X], if so) 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>02-20-2003</u>

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

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

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

2/18/2003

Date

(seal)

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
002	Raw Material Processing Operations Controlled by Baghouses	ACM1	\$250
006	Clinker and Cement Processing Operations Controlled by Baghouses		
008	Coal Mill and Coal Transfer System Controlled by Baghouses		

Application Processing Fee

Check one: Attached - Amount: \$250 Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

During the final design of the Suwannee American Cement Company (SAC) Branford Plant, changes to preliminary design and/or reconfiguration of the preliminary design have resulted in:

- 1. For Emissions Unit 002, the replacement of a single emission point for particulate matter emissions by two emission points with the addition of a second fabric filter dust collector to control emissions from the added emission point. Design flow rates and design operating temperatures have also been changed for certain control devices.**
- 2. For Emissions Unit 006, the addition of three new particulate matter emission points with associated fabric filter (baghouse) dust collectors; and**
- 3. the reconfiguration of three other particulate matter emission points and the associated fabric filter dust collectors. Design flow rates and design operating temperatures have also been changed for certain control devices.**
- 4. For Emissions Unit 008, a previously permitted single baghouse is being served by two baghouses with a combined exhaust and a higher flow rate.**

The design changes and reconfiguration will result in a net reduction in the design air flow rate from the affected emission units. This will result in a net decrease in the permitted particulate matter emission rate from the affected emission units. The net change in PM emissions from the changes detailed in this application is a decrease of 6.7 tons per year.

2. Projected or Actual Date of Commencement of Construction: N/A

3. Projected Date of Completion of Construction: March 1, 2003

Application Comment

The change in PM emissions from all emission points in emissions unit 002 is an increase from 6.2 tons per year to 6.3 tons per year.

The change in PM emissions from all emission points in emissions unit 006 is a decrease from 68.4 tons per year to 61.3 tons per year.

The change in PM emissions from all emission points in emissions unit 008 is an increase from 7.9 tons per year to 8.2 tons per year.

The net change in PM emissions from the changes detailed in this application is a decrease of 6.7 tons per year.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 321.4 km North (km): 3315.9			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 29° 57' 45" Longitude (DD/MM/SS): 82° 51' 03"			
3. Governmental Facility Code: 0	4. Facility Status Code: C	5. Facility Major Group SIC Code: 32	6. Facility SIC(s): 3241
7. Facility Comment (limit to 500 characters): None			

Facility Contact

1. Name and Title of Facility Contact: George Townsend – Environmental Manager		
2. Facility Contact Mailing Address: Organization/Firm: Suwannee American Cement Street Address: 5117 U.S. Highway 27 City: Branford State: Florida Zip Code: 32008		
3. Facility Contact Telephone Numbers: Telephone: (386) 935-0966 Fax: (386) 935-1155		

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input checked="" type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input checked="" type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	
It has not yet been determined whether the facility will be major for HAPs.	

List of Applicable Regulations

Title V Core List
NSPS Subparts Y and OOO
NESHAP Subpart LLL:
40 CFR 63.1340
40 CFR 63.1341
40 CFR 63.1342
40 CFR 63.1351
40 CFR 63.1353
40 CFR 63.1354
40 CFR 63.1355
40 CFR 63.1356
40 CFR 63.1357
40 CFR 63.1358
40 CFR 63.1359

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. <u>Requested Emissions Cap</u>		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
PM	A	Not Requested	Not Requested	No Basis	None
PM10	A	Not Requested	Not Requested	No Basis	None
SO2	A	Not Requested	Not Requested	No Basis	None
NOx	A	Not Requested	Not Requested	No Basis	None
CO	A	Not Requested	Not Requested	No Basis	None
VOC	B	Not Requested	Not Requested	No Basis	None
DIOX	B	Not Requested	Not Requested	No Basis	None
H114	B	Not Requested	Not Requested	No Basis	None

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested On file with Department
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested On file with Department
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: <u>Engineering Report</u>
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested On file with Department
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested On file with Department
6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: <u>Engineering Report</u>
7. Supplemental Requirements Comment: None

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable to current project
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
[] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
[] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
[] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):			
Raw Material Processing Operations Controlled by Baghouses			
4. Emissions Unit Identification Number: ID: 002		[] No ID [] ID Unknown	
5. Emissions Unit Status Code: C	6. Initial Startup Date: N/A	7. Emissions Unit Major Group SIC Code: 32	8. Acid Rain Unit? []
9. Emissions Unit Comment: (Limit to 500 Characters): None			

Emissions Unit Control Equipment

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

Fabric Filters – High Temperature

- E28
- E34 [NEW]

Fabric Filters – Medium Temperature

- G-07
- H-08

2. Control Device or Method Code(s): **016, 017**

Emissions Unit Details

1. Package Unit: Not Applicable	
Manufacturer:	Model Number:
2. Generator Nameplate Rating: Not Applicable MW	
3. Incinerator Information: Not Applicable	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: Not Applicable	mmBtu/hr
2. Maximum Incineration Rate: Not Applicable	lb/hr tons/day
3. Maximum Process or Throughput Rate: 178 TPH Dry Preheater Feed	
4. Maximum Production Rate: Not Applicable	
5. Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): None	

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

NESHAP Subpart LLL:

40 CFR 63.1348

40 CFR 63.1349(a)

40 CFR 63.1349(b)(2)

40 CFR 63.1349(c)

40 CFR 63.1350(a)

40 CFR 63.1350(b)

40 CFR 63.1350(j)

40 CFR 63.1350(l)

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? See below		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <p align="center">E-28: Aeropol @ Homogenizing Silo [NEW] E-34: Off-Spec Feed Handling G-07: Homogenizing Silo Inlet H-08: Homogenizing Silo Outlet</p>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: Table feet	7. Exit Diameter: Table feet	
8. Exit Temperature: Table °F	9. Actual Volumetric Flow Rate: Table acfm	10. Water Vapor: Table %	
11. Maximum Dry Standard Flow Rate: Table dscfm		12. Nonstack Emission Point Height: N/A feet	
13. Emission Point UTM Coordinates: Optional field – left blank Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): None			

	HEIGHT FT.	DIAM. FT.	TEMP. °F	ACFM	H2O	DSCFM
E-28	56	1.0	300	3,000	2%	2043
E-34	50	1.0	300	2,000	2%	1362
G-07	242	2.2	200	15,000	2%	11760
H-08	50	1.0	200	2,000	2%	1568
Total =						16732

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (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 TPH Dry Preheater Feed	5. Maximum Annual Rate: 1,427,880 TPY Dry Preheater Feed	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259		

**F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	016, 017	None	EL
PM10	016, 017	None	EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 1.43 lb/hour 6.3 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: Not Applicable [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.01 gr/dscf Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.01 gr/dscf x 16732 dscfm x 60 min/hr x 1 lb/7000 gr = 1.43 lb/hour @ 8760 hr/yr = 6.3 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259 The additional baghouse (E-34) increases annual emissions of PM from this emission unit. A higher design temperature for baghouse E-28 (300 °F instead of 212 °F) and a lower flow rate for baghouse H-08 (2000 acfm instead of 3000 acfm) reduce PM emissions from these emission points. The change in PM emissions from all emission points in this emissions unit is from 6.2 tons per year to 6.3 tons per year.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: Not Applicable
3. Requested Allowable Emissions and Units: 0.01 gr/dscf	4. Equivalent Allowable Emissions: 1.43 lb/hour 6.3 tons/year
5. Method of Compliance (limit to 60 characters): Method 9 in lieu of Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT: AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259	

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 1.22 lb/hour 5.3 tons/year	4. Synthetically Limited? [<input type="checkbox"/>]
5. Range of Estimated Fugitive Emissions: Not Applicable [<input type="checkbox"/>] 1 [<input type="checkbox"/>] 2 [<input type="checkbox"/>] 3 to _____ tons/year	
6. Emission Factor: 0.0085 gr/dscf Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.0085 gr/dscf x 16732 dscfm x 60 min/hr x 1 lb/7000 gr = 1.22 lb/hour @ 8760 hr/yr = 5.3 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259 There is no net change in PM ₁₀ emissions for all emission points in this emission unit. [From 5.3 tons per year to 5.3 tons per year]	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: Not Applicable
3. Requested Allowable Emissions and Units: 0.0085 gr/dscf	4. Equivalent Allowable Emissions: 1.22 lb/hour 5.3 tons/year
5. Method of Compliance (limit to 60 characters): Method 9 in lieu of Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT: AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 5% Exceptional Conditions: 5% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: Method 9	
5. Visible Emissions Comment (limit to 200 characters): BACT: 62-212.400 and 62-297.620(4), FAC. This limitation is more stringent than the NESHAP.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 10% Exceptional Conditions: 10% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: Method 9	
5. Visible Emissions Comment (limit to 200 characters): 40 CFR 63.1348: Affected sources other than raw mill	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code: Not Applicable	2. Pollutant(s):
3. CMS Requirement: [] Rule [] Other	
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: <u>Engineering Report</u>
2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>Engineering Report</u>
4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [] Not Applicable [X] Waiver Requested On file with Department
5. Compliance Test Report: [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>Engineering Report</u>
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment: <u>None</u>

Additional Supplemental Requirements for Title V Air Operation Permit Applications**[Not applicable to this application]**

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
[] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
[] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
[] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):			
Clinker and Cement Processing Operations Controlled by Baghouses			
4. Emissions Unit Identification Number:		[] No ID	
ID: 006		[] ID Unknown	
5. Emissions Unit Status Code: C	6. Initial Startup Date: N/A	7. Emissions Unit Major Group SIC Code: 32	8. Acid Rain Unit? []
9. Emissions Unit Comment: (Limit to 500 Characters): None			

Emissions Unit Control Equipment

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

Fabric Filters – Low Temperature

[New] L-25 Dust collector for gypsum/OS clinker transport

[New] M-09 Clinker conveyer

N-09 Dust collector for finish mill air separator

[New] N-36 Dust collector for fringe cement silo

P-03 Dust collector for cement transport conveyer [replaces Q-25]

P-11 Dust collector for cement storage silo [replaces Q-26]

Q-14 Dust collector for cement truck loadout

Q-17 Dust collector for cement truck loadout

Q-24 Dust collector for railcar loadout [replaces R-12]

Fabric Filters – Medium Temperature

M-08 Clinker conveyer

N-12 Dust collector for finish mill

N-91 Dust collector for finish mill

Fabric Filters – High Temperature

L-03 Dust collector for clinker conveyer

L-06 Dust collector for clinker silo inlet

2. Control Device or Method Code(s): 016, 017, 018

Emissions Unit Details

1. Package Unit: Not Applicable

Manufacturer:

Model Number:

2. Generator Nameplate Rating: Not Applicable MW

3. Incinerator Information: Not Applicable

Dwell Temperature:

°F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: Not Applicable	mmBtu/hr
2. Maximum Incineration Rate: Not Applicable	lb/hr tons/day
3. Maximum Process or Throughput Rate: 105 TPH Clinker	
4. Maximum Production Rate: 150 TPH Cement	
5. Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	
AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259	

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

NESHAP Subpart LLL:

40 CFR 63.1347

40 CFR 63.1348

40 CFR 63.1349(a)

40 CFR 63.1349(b)(2)

40 CFR 63.1349(c)

40 CFR 63.1350(a)

40 CFR 63.1350(b)

40 CFR 63.1350(e)

40 CFR 63.1350(j)

40 CFR 63.1350(l)

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? See below		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
<p>L-03 Dust collector for clinker conveyor L-06 Dust collector for clinker silo inlet [New] L-25 Dust collector for gypsum/OS clinker transport M-08 Dust collector for clinker conveyor [New] M-09 Dust collector for clinker conveyor N-09 Dust collector for finish mill air separator N-12 Dust collector for finish mill [New] N-36 Dust collector for fringe cement silo N-91 Dust collector for finish mill P-03 Dust collector for cement transport conveyor [replaces Q-25] P-11 Dust collector for cement storage silo [replaces Q-26] Q-14 Dust collector for cement truck loadout Q-17 Dust collector for cement truck loadout Q-24 Dust collector for railcar loadout [replaces R-12]</p>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: N/A			
5. Discharge Type Code: V	6. Stack Height: Table feet	7. Exit Diameter: Table feet	
8. Exit Temperature: Table °F	9. Actual Volumetric Flow Rate: Table acfm	10. Water Vapor: Table %	
11. Maximum Dry Standard Flow Rate: Table dscfm		12. Nonstack Emission Point Height: Not Applicable feet	
13. Emission Point UTM Coordinates: Optional field – left blank			
Zone:		East (km):	North (km):
14. Emission Point Comment (limit to 200 characters): None			

	HEIGHT FT.	DIAM. FT.	TEMP. °F	ACFM	H2O	DSCFM
L-03	37	1.0	300	3,000	2%	2043
L-06	192	1.1	300	6,000	2%	4085
L-25	82	1.0	90	4,000	2%	3763
M-08	19	1.1	212	6,000	2%	4620
M-09	10	1.1	90	3,000	2%	2822
N-09	131	7.6	158	103,600	2%	86742
N-12	131	4.0	203	35,000	2%	27316
N-36	65	1.4	130	4,000	2%	3508
N-91	47	1.4	200	6,000	2%	4704
P-03	54	1.0	130	3,000	2%	2631
P-11	195	2.0	130	15,000	2%	13155
Q-14	29	1.0	130	3,000	2%	2631
Q-17	39	1.0	130	3,000	2%	2631
Q-24	57	1.0	130	3,000	2%	2631
Total =						163283

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Mineral Products: Cement Manufacturing – Dry Process: Clinker Transfer		
2. Source Classification Code (SCC): 3-05-006-16		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 105	5. Maximum Annual Rate: 839,500	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Mineral Products: Cement Manufacturing – Dry Process: Clinker Silos		
2. Source Classification Code (SCC): 3-05-006-15		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 105	5. Maximum Annual Rate: 839,500	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259		

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Mineral Products: Cement Manufacturing – Dry Process: Finish Grinding Mill		
2. Source Classification Code (SCC): 3-05-006-17		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 150	5. Maximum Annual Rate: 1,191,360	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): PERMIT 1210465-001-AC, PSD-FL-259		

Segment Description and Rate: Segment 4 of 5

1. Segment/Description (Process/Fuel Type) (limit to 500 characters): Mineral Products: Cement Manufacturing – Dry Process: Cement Silos		
2. Source Classification Code (SCC): 3-05-006-18		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 150	5. Maximum Annual Rate: 1,191,360	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): PERMIT 1210465-001-AC, PSD-FL-259		

Segment Description and Rate: Segment 5 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Mineral Products: Cement Manufacturing – Dry Process: Cement Loadout		
2. Source Classification Code (SCC): 3-05-006-19		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 500	5. Maximum Annual Rate: 1,191,360	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): Annual rate limited by cement production		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	016, 017, 018	None	EL
PM10	016, 017, 018	None	EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 14.00 lb/hour 61.3 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: Not Applicable [] 1 [] 2 [] 3 to tons/year	
6. Emission Factors: 0.01 gr/dscf Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): <u>Baghouses</u> 0.01 gr/dscf x 163,283 dscfm x 60 min/hr x 1 lb/7000 gr = 14.00 lb/hour @ 8760 hours/year = 61.3 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The additional baghouses change annual emissions of PM from this emission unit. Different design temperatures and flow rates for other baghouses change PM emissions from these emission points. The change in PM emissions from all emission points in this emissions unit is from 68.4 tons per year to 61.3 tons per year.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: Not Applicable
3. Requested Allowable Emissions and Units: 0.01 gr/dscf	4. Equivalent Allowable Emissions: 14.00 lb/hour 61.3 tons/year
5. Method of Compliance (limit to 60 characters): Method 5 (N-09 & N-12) Method 9 in lieu of Method 5 (other baghouses)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT: 62-212.400, FAC	

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 11.90 lb/hour 52.1 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: Not Applicable [] 1 [] 2 [] 3 to tons/year	
6. Emission Factors: 0.0085 gr/dscf Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): <u>Baghouses</u> $0.0085 \text{ gr/dscf} \times 163,283 \text{ dscfm} \times 60 \text{ min/hr} \times 1 \text{ lb/7000 gr} = 11.90 \text{ lb/hour}$ @ 8760 hours/year = 52.1 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The change in PM10 emissions from all emission points in this emissions unit is from 58.1 tons per year to 52.1 tons per year.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: Not Applicable
3. Requested Allowable Emissions and Units: 0.0085 gr/dscf	4. Equivalent Allowable Emissions: 11.90 lb/hour 52.1 tons/year
5. Method of Compliance (limit to 60 characters): Method 5 (N-09 & N-12) Method 9 in lieu of Method 5 (other baghouses)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT: 62-212.400, FAC	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5% Exceptional Conditions: 5% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: Method 9	
5. Visible Emissions Comment (limit to 200 characters): BACT: 62-212.400, FAC. This limitation is more stringent than the NESHAP.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 10% Exceptional Conditions: 10% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: Method 9	
5. Visible Emissions Comment (limit to 200 characters): 40 CFR 63.1347 40 CFR 63.1348	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code: Not Applicable	2. Pollutant(s):
3. CMS Requirement:	[] Rule [] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

Supplemental Requirements

1. Process Flow Diagram [] Attached, Document ID: <u>Engineering Report</u>
2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [] Attached, Document ID: <u>Engineering Report</u>
4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [] Not Applicable [X] Waiver Requested
5. Compliance Test Report: [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [] Not Applicable [] Waiver Requested To be provided under separate cover
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [] Not Applicable [] Waiver Requested To be provided under separate cover
8. Supplemental Information for Construction Permit Application [] Attached, Document ID: <u>Engineering Report</u>
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment: None

Additional Supplemental Requirements for Title V Air Operation Permit Applications**[Not applicable to this application]**

<p>11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>15. Acid Rain Part Application (Hard-copy Required)</p> <p><input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____</p> <p><input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____</p> <p><input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
[] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
[] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
[] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):			
Coal Mill and Coal Transfer System Controlled by Baghouses			
4. Emissions Unit Identification Number: ID: 008		[] No ID [] ID Unknown	
5. Emissions Unit Status Code: C	6. Initial Startup Date: N/A	7. Emissions Unit Major Group SIC Code: 32	8. Acid Rain Unit? []
9. Emissions Unit Comment: (Limit to 500 Characters) : None			

Emissions Unit Control Equipment

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

Fabric Filters – Low Temperature

- S-17 East: Coal mill
- S-17 West: Coal mill
- S-21: Coal bin

2. Control Device or Method Code(s): **018**

Emissions Unit Details

1. Package Unit: Not Applicable	
Manufacturer:	Model Number:
2. Generator Nameplate Rating: Not Applicable MW	
3. Incinerator Information: Not Applicable	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: Not Applicable	mmBtu/hr
2. Maximum Incineration Rate: Not Applicable	lb/hr tons/day
3. Maximum Process or Throughput Rate: 10,658 tons of coal and petroleum coke per month & 127,896 tons per year	
4. Maximum Production Rate: Not Applicable	
5. Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): None	

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

62-212.400, FAC
NSPS Subpart Y

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? S-17, S-21		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
<ul style="list-style-type: none"> • S-17 East: Coal mill • S-17 West: Coal mill • S-21: Coal bin 			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
Not Applicable			
5. Discharge Type Code: V	6. Stack Height: Table feet	7. Exit Diameter: Table feet	
8. Exit Temperature: Table °F	9. Actual Volumetric Flow Rate: Table acfm	10. Water Vapor: Table %	
11. Maximum Dry Standard Flow Rate: Table dscfm	12. Nonstack Emission Point Height: Not Applicable feet		
13. Emission Point UTM Coordinates: Optional field – left blank			
Zone:	East (km):	North (km):	
14. Emission Point Comment (limit to 200 characters): None			

	HEIGHT FT.	DIAM. FT.	TEMP. °F	ACFM	H2O	DSCFM
S-17 East	15	3.0	150	12,500	6.5%	10116
S-17 West	15	3.0	150	12,500	6.5%	10116
S-21	60	1.0	150	2,000	2%	1697
Total =						21,929

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Mineral Products: Coal Crushing		
2. Source Classification Code (SCC): 3-05-010-10		3. SCC Units: Tons Processed
4. Maximum Hourly Rate: 14.6 TPH (monthly avg.)	5. Maximum Annual Rate: 127,896	6. Estimated Annual Activity Factor: Not Applicable
7. Maximum % Sulfur: Not Applicable	8. Maximum % Ash: Not Applicable	9. Million Btu per SCC Unit: Not Applicable
10. Segment Comment (limit to 200 characters): None		

**F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018	None	EL
PM10	018	None	NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
 (Regulated Emissions Units -
 Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 1.88 lb/hour 8.2 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: Not Applicable [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.01 gr/dscf Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.01 gr/dscf x 21929 dscfm x 60 min/hr x 1 lb/7000 gr = 1.88 lb/hour @ 8760 hr/yr = 8.2 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259 The additional baghouse and a higher total flow rate for the coal mill (25000 acfm instead of 24000 acfm) increases PM emissions from these emission points. The change in PM emissions from all emission points in this emissions unit is from 7.9 tons per year to 8.2 tons per year.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: Not Applicable
3. Requested Allowable Emissions and Units: 0.01 gr/dscf	4. Equivalent Allowable Emissions: 1.88 lb/hour 8.2 tons/year
5. Method of Compliance (limit to 60 characters): Method 5: Initial for S-17 East/S-17 West Method 9: In lieu of Method 9 for S-21	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT: AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259	

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: 99%
3. Potential Emissions: 1.88 lb/hour 8.2 tons/year	4. Synthetically Limited? [<input type="checkbox"/>]
5. Range of Estimated Fugitive Emissions: Not Applicable [<input type="checkbox"/>] 1 [<input type="checkbox"/>] 2 [<input type="checkbox"/>] 3 to tons/year	
6. Emission Factor: 0.01 gr/dscf Reference: BACT	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.01 gr/dscf x 21929 dscfm x 60 min/hr x 1 lb/7000 gr = 1.88 lb/hour @ 8760 hr/yr = 8.2 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259 The additional baghouse and a higher total flow rate for the coal mill (25000 acfm instead of 24000 acfm) increases PM10 emissions from these emission points. The change in PM10 emissions from all emission points in this emissions unit is from 7.9 tons per year to 8.2 tons per year.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: Not Applicable
3. Requested Allowable Emissions and Units: 0.01 gr/dscf	4. Equivalent Allowable Emissions: 1.88 lb/hour 8.2 tons/year
5. Method of Compliance (limit to 60 characters): Method 5: Initial for S-17 East/S-17 West Method 9: In lieu of Method 9 for S-21	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): BACT: AIR CONSTRUCTION PERMIT 1210465-001-AC, PSD-FL-259	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 5% Exceptional Conditions: 5% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: Method 9	
5. Visible Emissions Comment (limit to 200 characters): BACT 62-212.400, FAC	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 20% Exceptional Conditions: 20% Maximum Period of Excess Opacity Allowed: 0 min/hour	
4. Method of Compliance: Method 9	
5. Visible Emissions Comment (limit to 200 characters): 40 CFR 60.252(a)(2) Coal handling	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code: TEMP	2. Pollutant(s): N/A
3. CMS Requirement:	[X] Rule [] Other
4. Monitor Information: Not yet available Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): <u>40 CFR 60.253 Monitoring of operations:</u> The coal mill, emission point S-17 of emissions unit 008, is subject to the requirements for thermal dryers. (a) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows: (1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit.	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

Supplemental Requirements

1. Process Flow Diagram [] Attached, Document ID: _____ [] Not Applicable [X] Waiver Requested
2. Fuel Analysis or Specification [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: <u>Engineering Report</u>
4. Description of Stack Sampling Facilities [] Attached, Document ID: _____ [] Not Applicable [X] Waiver Requested
5. Compliance Test Report: [] Attached, Document ID: _____ [] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [] Not Applicable [] Waiver Requested To be provided under separate cover
8. Supplemental Information for Construction Permit Application [X] Attached, Document ID: <u>Engineering Report</u>
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment: None

Additional Supplemental Requirements for Title V Air Operation Permit Applications**[Not applicable to this application]**

<p>11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable</p>
<p>15. Acid Rain Part Application (Hard-copy Required)</p> <p><input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____</p> <p><input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____</p> <p><input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____</p> <p><input type="checkbox"/> Not Applicable</p>

APPENDIX 1
Engineering Report & Attachments

Engineering Report In Support of Permit Amendment
Suwannee American Cement Company, Inc.
Branford Plant
DEP File No. 1210465-001-AC, PSD-FL-259

DUST COLLECTOR REVISIONS

During the final design of the Suwannee American Cement Company (SAC) Branford Plant, changes in preliminary design and/or reconfiguration of the preliminary design has resulted in the addition of three new particulate matter emission points and the associated fabric filter (baghouse) dust collectors; the replacement of a single emission point for particulate matter emissions by two emission points and the addition of a second fabric filter dust collector to control emissions from the added emission point; and the reconfiguration of three other particulate matter emission points and the associated fabric filter dust collectors. The design changes and reconfiguration will result in a reduction in the design air flow rate from the affected emission points and a reduction in total particulate matter emissions.

The process flow diagrams for the SAC plant as permitted are contained in Attachment 1. These process sheets show the baghouses that are currently permitted. The process flow sheets included in Attachment 2 show the design changes and/or reconfiguration with the added and replacement baghouses. Attachment 3 contains the specifications for all of the plant dust collectors.

Following is a brief description of the equipment changes. All emission points are presumed to operate 8,760 hours per year.

EMISSION UNIT 002

Dust from the kiln baghouse was originally transferred pneumatically to an Alleviator (Equipment No. 25-01; to vent the pneumatic transfer system) and then to a Distribution Box (E30-01). From the distribution box, the baghouse dust was originally transferred to the Homogenizing Silo (G01-01) or to a screw conveyor (E27-01). The Screw Conveyor, in turn, transferred the baghouse dust to the Kiln Dosing System (H05-01). The dust from the alleviator and distribution box was originally to be controlled by baghouse E-28 (3,000 acfm @ 212°F).

To eliminate the Screw Conveyor (E27-01), the pneumatic transfer of the kiln baghouse dust is now through a diverter valve which transfers the dust either to the alleviator (E25-01) still controlled by baghouse E28, or to the distribution box (E30-01) which is now controlled by new baghouse E-34 (2,000 acfm @ 300°F).

In essence, baghouses E-28 and E-34 are now doing what baghouse E-28 was previously designed to handle. For permitting purposes, it is presumed that both baghouses will operate continually.

EMISSION UNIT 006

Gypsum Storage Silo

Gypsum Storage Silo (L09-01) was added and is vented through new Baghouse L-25 (4,000 acfm @ 90°F).

Off-spec Clinker Silo

Off-Spec Clinker Silo (L08-01) was added and is also vented through new Baghouse L-25 (4,000 acfm @ 90°F).

Clinker Conveyor

The Gypsum Silo and Off-Spec Clinker Silo both discharge onto existing Pan Conveyor (M19-01) which transfers materials to the finish mill system. Dust from the discharge from the Gypsum Silo and Off-Spec Clinker Silo onto the pan conveyor is controlled by new Baghouse M-09 (3,000 acfm @ 90°F).

Fringe Cement Silo

A 140 ton Fringe Cement Silo (N30-01) was added following the finish mill to store off-spec cement. This silo is vented through new Baghouse N-36 (4,000 acfm @ 130°F). The fringe cement is blended back through the finish mill system with dust from material transfer handled by existing dust collectors.

Cement Silos

The existing design for the transfer of cement from the finish mill into cement silos 1-5 had potential particulate matter emissions controlled by two identical baghouses; Baghouse Q-25 and Baghouse Q-26 (both 12,000 acfm @ 150°F).

As a result of reconfiguration, Baghouses Q-25 and Q-26 are replaced by Baghouses P-03 (3,000 acfm @ 130°F) and P-11 (15,000 acfm @ 130°F).

Cement Pack-house

The original plant design envisioned a cement pack-house (cement bagging). The pack-house is not being constructed at this time. Baghouse R-12 (12,000 acfm @ 150°F) which was designed to control particulate matter emissions from the pack-house, will not be installed.

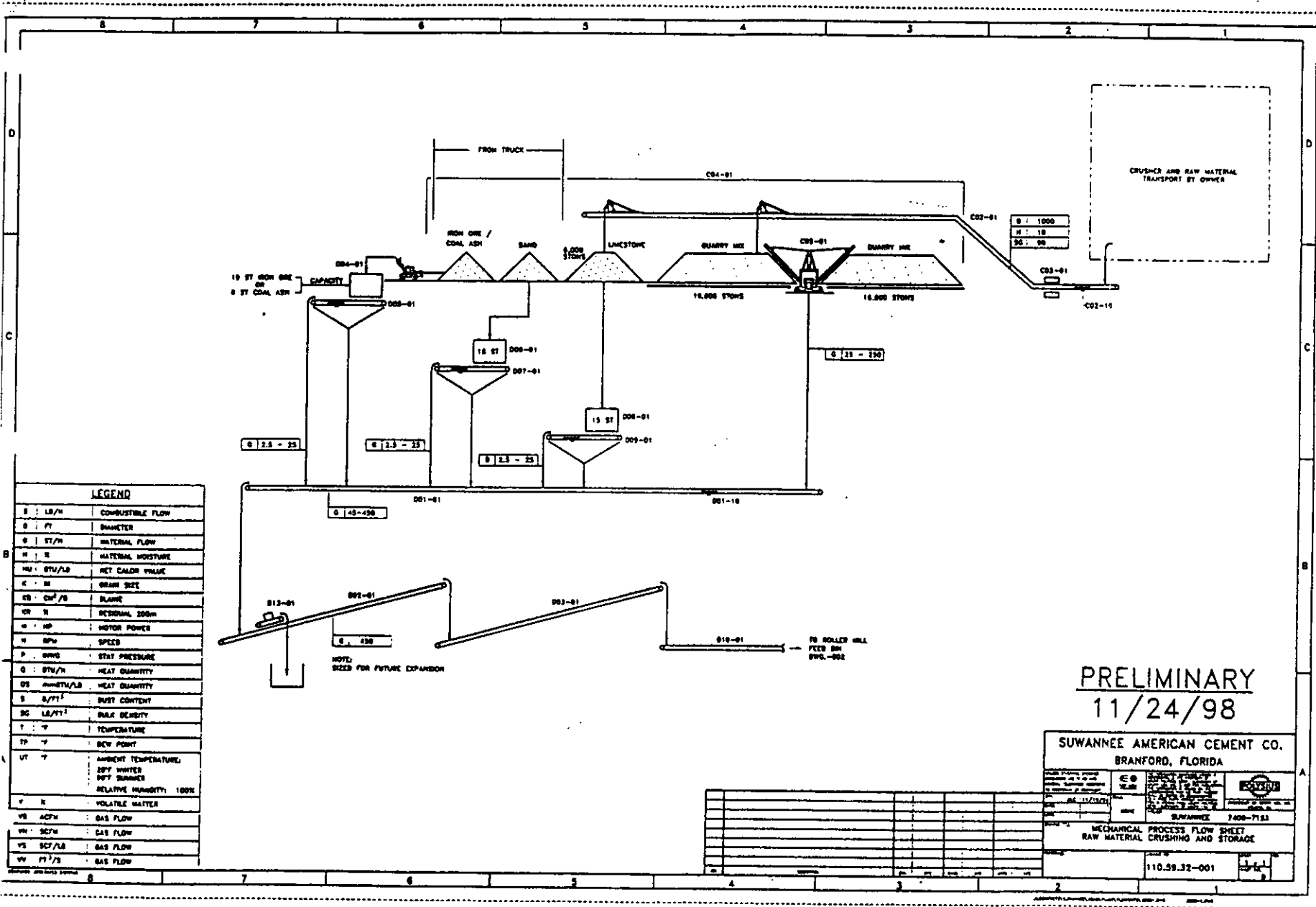
Rail Car Loadout

Rather than building a cement pack-house at this time, SAC has reconfigured the plant for a rail car loading system. The potential particulate matter emissions from rail car loadout will be controlled by Baghouse Q-24 (3,000 acfm @ 130°F).

EMISSION UNIT 008

For Emissions Unit 008, a previously permitted single baghouse is being served by two baghouses with a combined exhaust and a higher flow rate. The coal mill was previously to have been controlled by a single baghouse (S-17) with a flow rate of 24,000 acfm. It is proposed to control the coal mill with two baghouses (S-17 east and S-17 west), with a common stack and a total flow rate of 25,000 acfm.

ATTACHMENT 1
Process Flow Diagrams – As Permitted



PRELIMINARY
11/24/98

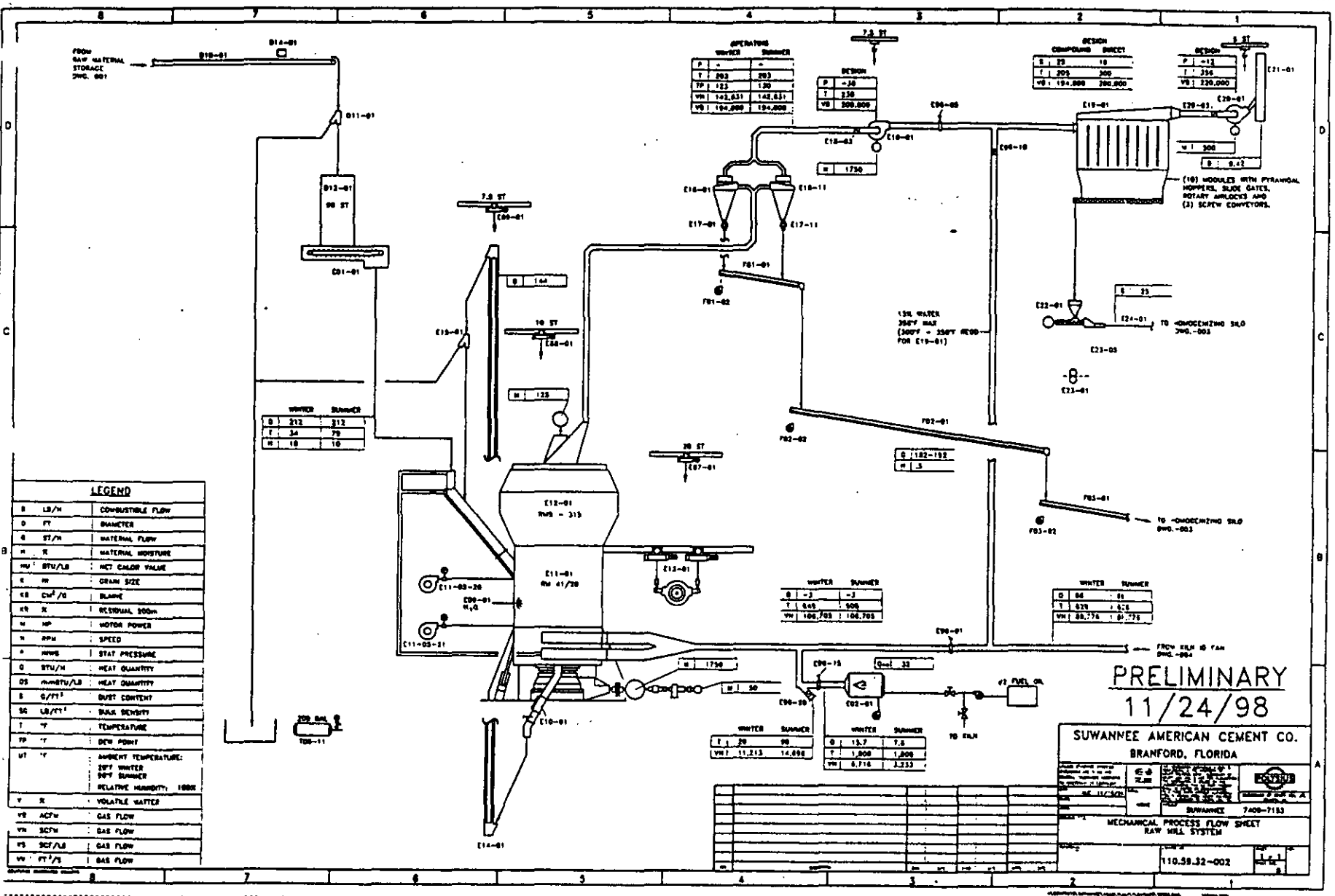
SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

MECHANICAL PROCESS FLOW SHEET
RAW MATERIAL CRUSHING AND STORAGE

110.59.32-001

LEGEND	
B	LB/H COMBUSTIBLE FLOW
D	FT DIAMETER
G	ST/H MATERIAL FLOW
H	% MATERIAL MOISTURE
HU	BTU/LB NET CALOR VALUE
K	MM GRAIN SIZE
KB	CM ² /S BLANE
KR	% REDONAL DDM
M	HP MOTOR POWER
N	MPH SPEED
P	PSIG STAT PRESSURE
Q	BTU/H HEAT QUANTITY
QS	MMBTU/LB HEAT QUANTITY
R	% DUST CONTENT
SG	LB/FT ³ BULK DENSITY
T	°F TEMPERATURE
TP	°F DEW POINT
UT	°F AMBIENT TEMPERATURE SPY WINTER WYF SUMMER RELATIVE HUMIDITY: 100%
V	% VOLATILE MATTER
VB	ACFM GAS FLOW
VN	SCFM GAS FLOW
VS	SCF/LB GAS FLOW
VV	FT ³ /S GAS FLOW

DRAFT



LEGEND

B	LB/H	COMBUSTIBLE FLOW
D	FT	DIAMETER
E	ST/H	MATERIAL FLOW
H	%	MATERIAL MOISTURE
HU	BTU/LB	NET CALOR VALUE
G	IN	GRAN SIZE
KB	CM ² /S	BLAISE
KR	%	RESIDUAL SOON
M	HP	MOTOR POWER
N	MPH	SPEED
P	MMHG	STAT PRESSURE
Q	BTU/H	HEAT QUANTITY
QS	MMBTU/LB	HEAT QUANTITY
S	G/TT ³	BUST CONTENT
SG	LB/TT ³	SLURRY DENSITY
T	°F	TEMPERATURE
TP	°F	DEW POINT
WT	°F	AMBIENT TEMPERATURE: DPT WINTER DPT SUMMER RELATIVE HUMIDITY: 100%
V	%	VOLATILE MATTER
V2	ACFM	GAS FLOW
V3	SCFM	GAS FLOW
V4	SCF/LB	GAS FLOW
V5	FT ³ /S	GAS FLOW

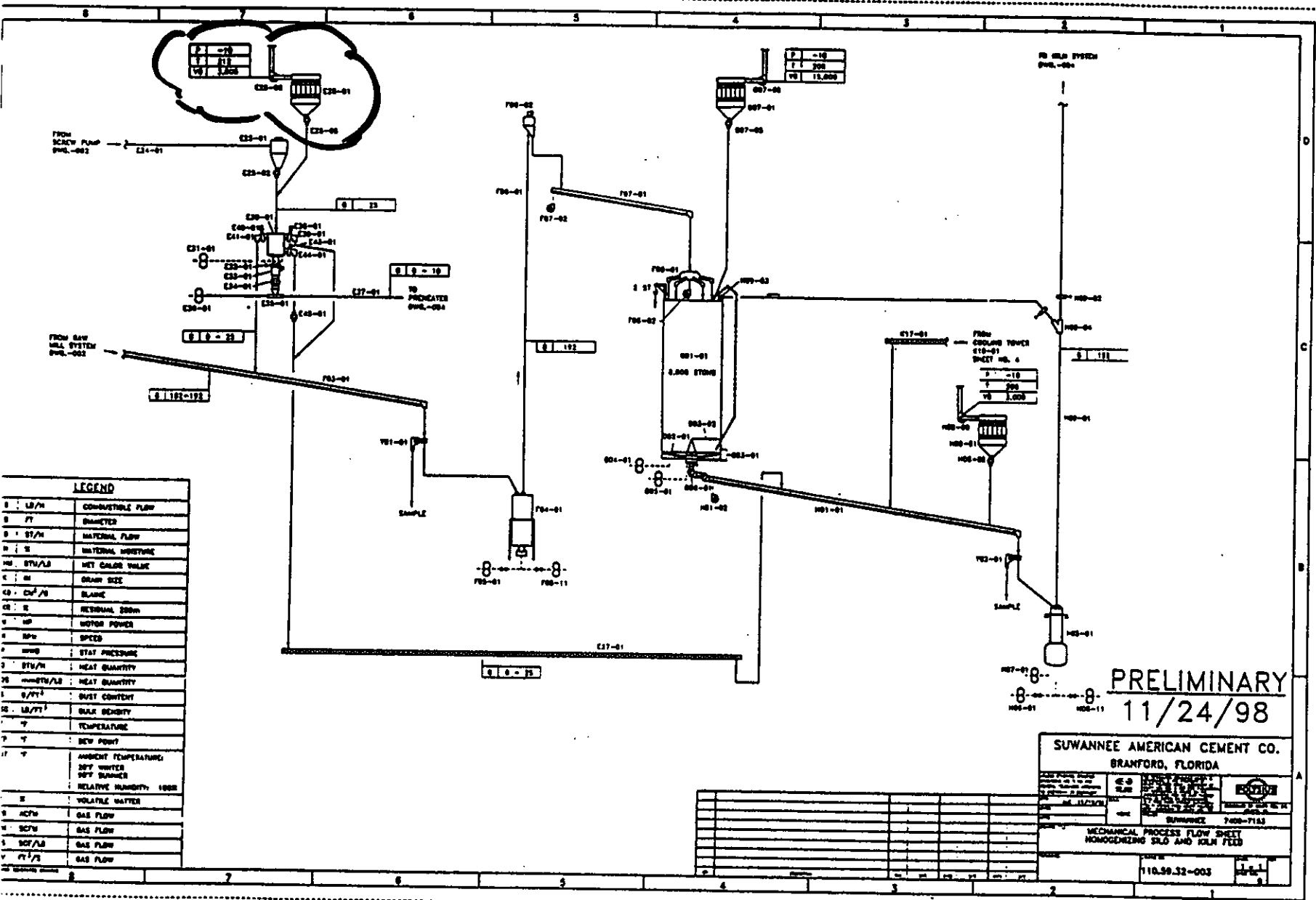
PRELIMINARY
11/24/98

SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

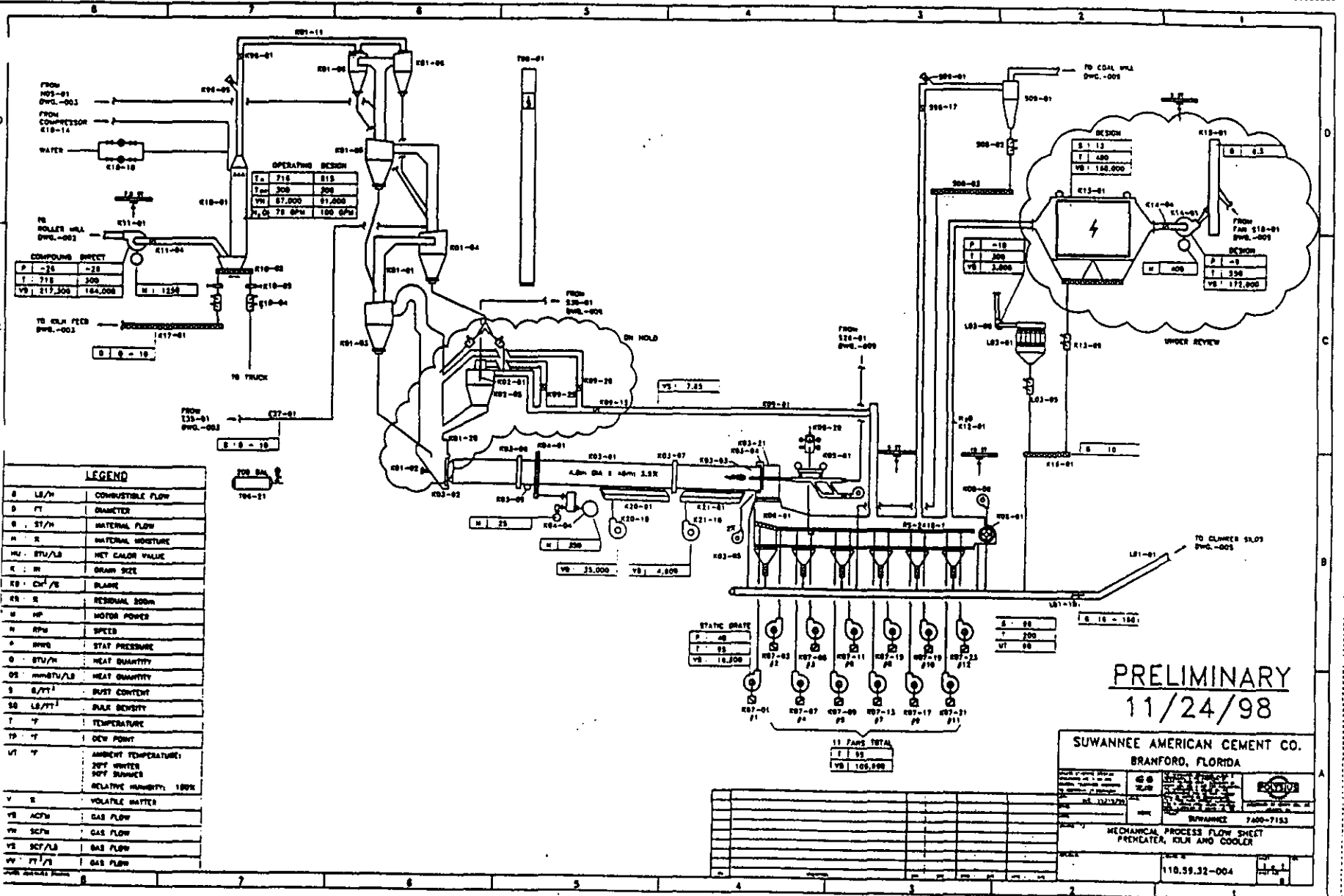
MECHANICAL PROCESS FLOW SHEET
RAW MILL SYSTEM

110.59.32-002

DRAFT



DRAFT



LEGEND		
S	LB/H	COMBUSTIBLE FLOW
D	FT	DIAMETER
B	BT/H	MATERIAL FLOW
M	%	MATERIAL MOISTURE
HU	BTU/LB	HEAT CALOR VALUE
K	IN	GRIND SIZE
KB	CM ² /S	BLANK
RS	S	RESERVOIR ROOM
HP	HP	MOTOR POWER
N	RPM	SPEED
P	MMHG	STAT PRESSURE
Q	BTU/H	HEAT QUANTITY
QS	MMBTU/LB	HEAT QUANTITY
S	S/FT ²	RUST CONTENT
SG	LB/FT ³	SLURRY DENSITY
T	°F	TEMPERATURE
TP	°F	DEW POINT
UT	°F	AIRBENT TEMPERATURE: SOFT WINTER SOFT SUMMER RELATIVE HUMIDITY: 100%
V	S	VOLATILE MATTER
VB	ACFM	GAS FLOW
VM	SCFM	GAS FLOW
VS	SCF/LB	GAS FLOW
VV	FT ³ /S	GAS FLOW

OPERATING DESIGN		
T	715	815
I	300	200
VM	87,000	81,000
VM	70 GPM	100 GPM

DESIGN		
S	13	8.3
T	400	
VB	160,000	

STATIC GRATE		
S	40	
T	20	
VB	18,300	

11 FANS TOTAL		
T	55	
VB	100,000	

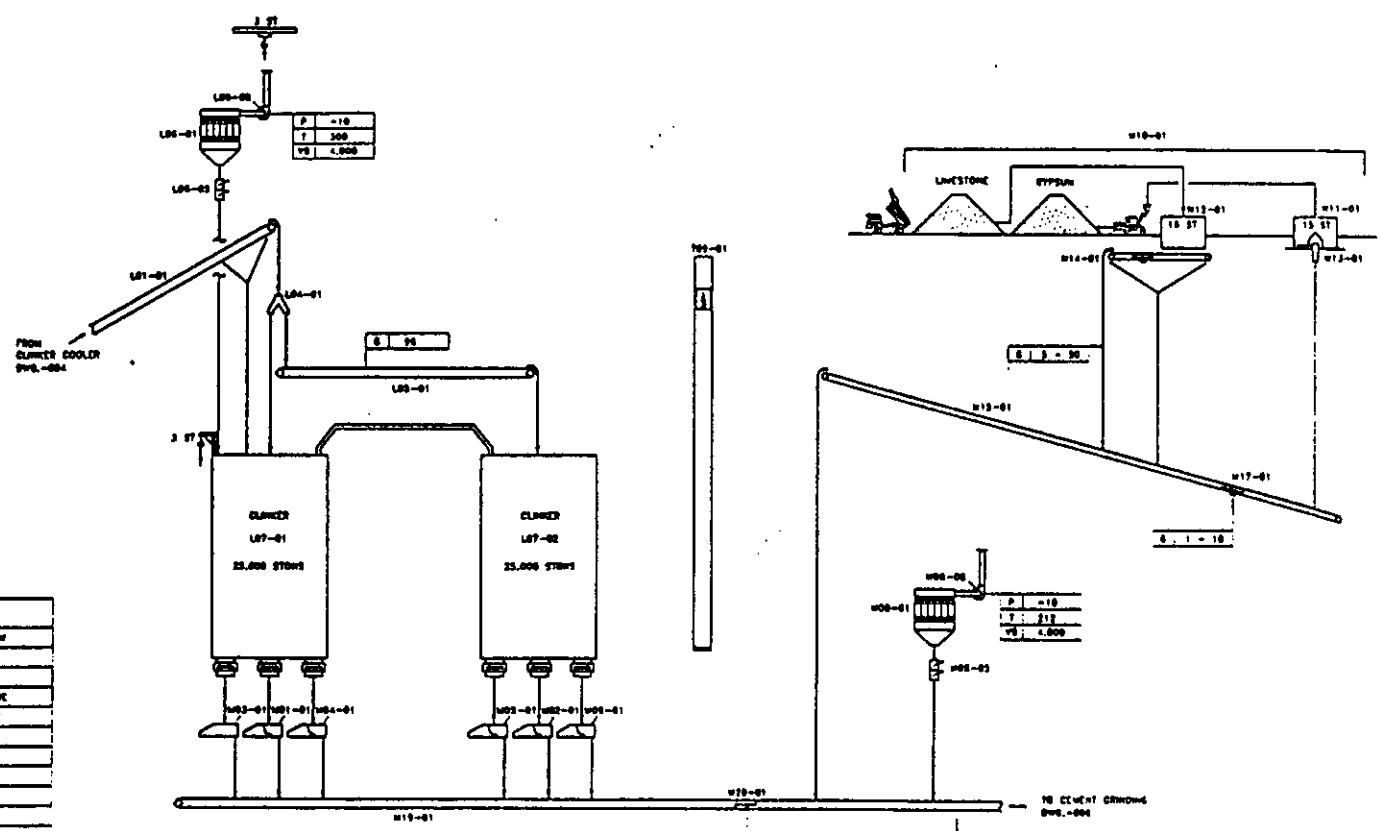
PRELIMINARY
11/24/98

SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

MECHANICAL PROCESS FLOW SHEET
PREHEATER, KILN AND COOLER

110.59.32-004

DRAFT



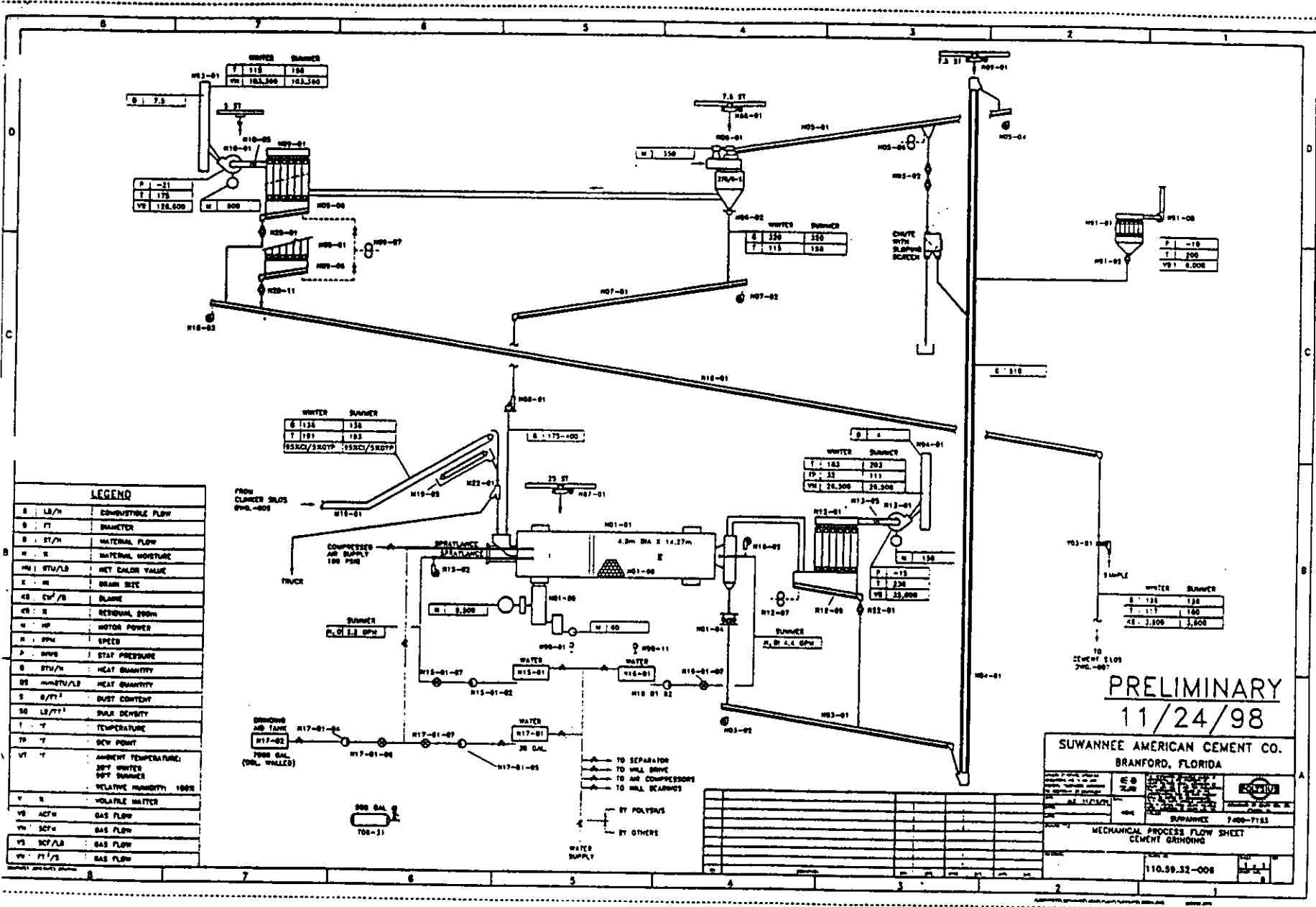
LEGEND	
D	LB/H COMBUSTIBLE FLOW
D	FT DIAMETER
M	ST/H MATERIAL FLOW
M	% MATERIAL MOISTURE
M	BTU/LB NET CALOR VALUE
E	IN GRAIN SIZE
ES	CM ² /S BLADE
ER	% RESIDUAL 200M
M	HP MOTOR POWER
R	RPM SPEED
P	MMHG STAT PRESSURE
Q	BTU/H HEAT QUANTITY
QS	MM-BTU/LB HEAT QUANTITY
S	% DUST CONTENT
SD	LB/FT ³ BULK DENSITY
T	°F TEMPERATURE
TD	°F DEW POINT
WT	°F AMBIENT TEMPERATURE
	°F SOFT WATER
	°F SOFT WATER
	% RELATIVE HUMIDITY 100%
V	% VOLATILE MATTER
VS	SCFH GAS FLOW
VW	SCFH GAS FLOW
VW	SCFH GAS FLOW
VW	SCFH GAS FLOW

PRELIMINARY
11/24/98

SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

DATE	11/24/98
BY	MECHANICAL
CHKD	SURNAMEZ
NO.	7400-7155
MECHANICAL PROCESS FLOW SHEET CLINKER GRINDS AND ADDITIVES	
SCALE	110.59.32-005

DRAFT



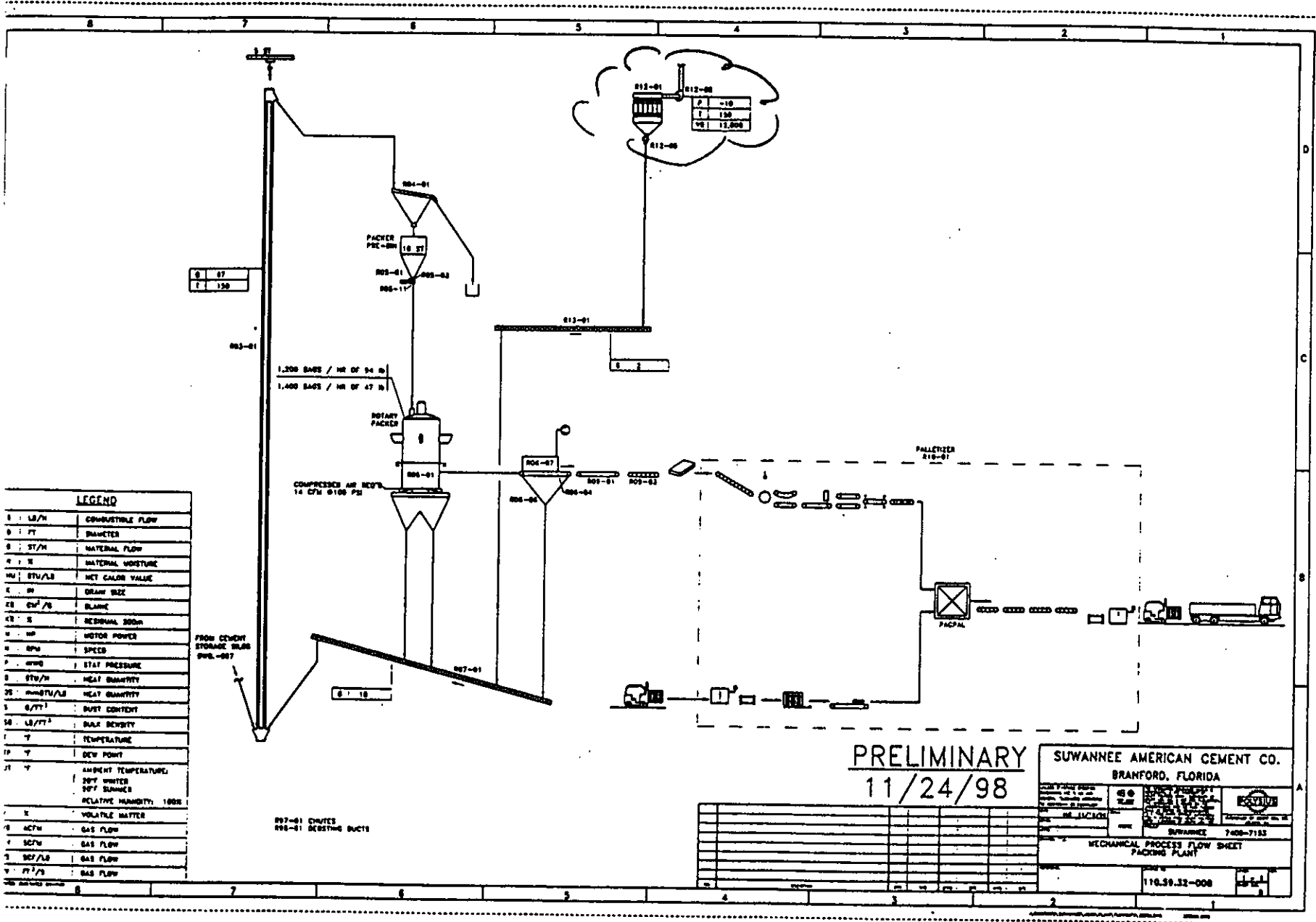
LEGEND	
B	LA/H CONVEYABLE FLOW
D	FT DIAMETER
E	ST/H MATERIAL FLOW
H	% MATERIAL MOISTURE
M1	STU/LB NET CALOR VALUE
S	IN GRAB SIZE
CS	CV/S BLAME
CR	R RESONAL ROOM
M	HP MOTOR POWER
R	PPM SPEED
P	PSI STAT PRESSURE
Q	BTU/H HEAT QUANTITY
QS	MMBTU/LB HEAT QUANTITY
S	BTU/°F DUST CONTENT
SG	LB/FT³ SLUR DENSITY
T	°F TEMPERATURE
TP	°F DRY POINT
VT	°F AMBIENT TEMPERATURE
	SEPT WINTER
	SEPT SUMMER
	RELATIVE HUMIDITY 100%
V	% VOLATILE MATTER
VS	ACFM GAS FLOW
VM	SCFM GAS FLOW
V3	SCY/LB GAS FLOW
V4	FT³/S GAS FLOW

PRELIMINARY
11/24/98

SUWANNEE AMERICAN CEMENT CO.
BRAMFORD, FLORIDA

DATE	7-00-7123
MECHANICAL PROCESS FLOW SHEET	CEMENT GRINDING
NO. 110.59.32-008	

DRAFT



LEGEND

1	LB/H	CONDUCTIBLE FLOW
2	FT	DIAMETER
3	ST/H	MATERIAL FLOW
4	%	MATERIAL MOISTURE
5	BTU/LB	NET CALOR VALUE
6	IN	GRAB SIZE
7	CFM	BLANK
8	%	REDSHALL 300H
9	HP	MOTOR POWER
10	OPM	SPEED
11	PSIG	STAT PRESSURE
12	BTU/H	HEAT SENSITIVITY
13	BTU/LB	HEAT SENSITIVITY
14	BTU/LB	HEAT SENSITIVITY
15	BTU/LB	HEAT SENSITIVITY
16	LB/TT	BAK DENSITY
17	°F	TEMPERATURE
18	°F	DEW POINT
19	°F	AMBIENT TEMPERATURE
20	°F	SOFT SPINNER
21	°F	SOFT SPINNER
22	%	RELATIVE HUMIDITY 100%
23	%	RELATIVE HUMIDITY 100%
24	%	RELATIVE HUMIDITY 100%
25	%	RELATIVE HUMIDITY 100%
26	%	RELATIVE HUMIDITY 100%
27	%	RELATIVE HUMIDITY 100%
28	%	RELATIVE HUMIDITY 100%
29	%	RELATIVE HUMIDITY 100%
30	%	RELATIVE HUMIDITY 100%
31	%	RELATIVE HUMIDITY 100%
32	%	RELATIVE HUMIDITY 100%
33	%	RELATIVE HUMIDITY 100%
34	%	RELATIVE HUMIDITY 100%
35	%	RELATIVE HUMIDITY 100%
36	%	RELATIVE HUMIDITY 100%
37	%	RELATIVE HUMIDITY 100%
38	%	RELATIVE HUMIDITY 100%
39	%	RELATIVE HUMIDITY 100%
40	%	RELATIVE HUMIDITY 100%
41	%	RELATIVE HUMIDITY 100%
42	%	RELATIVE HUMIDITY 100%
43	%	RELATIVE HUMIDITY 100%
44	%	RELATIVE HUMIDITY 100%
45	%	RELATIVE HUMIDITY 100%
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51	%	RELATIVE HUMIDITY 100%
52	%	RELATIVE HUMIDITY 100%
53	%	RELATIVE HUMIDITY 100%
54	%	RELATIVE HUMIDITY 100%
55	%	RELATIVE HUMIDITY 100%
56	%	RELATIVE HUMIDITY 100%
57	%	RELATIVE HUMIDITY 100%
58	%	RELATIVE HUMIDITY 100%
59	%	RELATIVE HUMIDITY 100%
60	%	RELATIVE HUMIDITY 100%
61	%	RELATIVE HUMIDITY 100%
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63	%	RELATIVE HUMIDITY 100%
64	%	RELATIVE HUMIDITY 100%
65	%	RELATIVE HUMIDITY 100%
66	%	RELATIVE HUMIDITY 100%
67	%	RELATIVE HUMIDITY 100%
68	%	RELATIVE HUMIDITY 100%
69	%	RELATIVE HUMIDITY 100%
70	%	RELATIVE HUMIDITY 100%
71	%	RELATIVE HUMIDITY 100%
72	%	RELATIVE HUMIDITY 100%
73	%	RELATIVE HUMIDITY 100%
74	%	RELATIVE HUMIDITY 100%
75	%	RELATIVE HUMIDITY 100%
76	%	RELATIVE HUMIDITY 100%
77	%	RELATIVE HUMIDITY 100%
78	%	RELATIVE HUMIDITY 100%
79	%	RELATIVE HUMIDITY 100%
80	%	RELATIVE HUMIDITY 100%
81	%	RELATIVE HUMIDITY 100%
82	%	RELATIVE HUMIDITY 100%
83	%	RELATIVE HUMIDITY 100%
84	%	RELATIVE HUMIDITY 100%
85	%	RELATIVE HUMIDITY 100%
86	%	RELATIVE HUMIDITY 100%
87	%	RELATIVE HUMIDITY 100%
88	%	RELATIVE HUMIDITY 100%
89	%	RELATIVE HUMIDITY 100%
90	%	RELATIVE HUMIDITY 100%
91	%	RELATIVE HUMIDITY 100%
92	%	RELATIVE HUMIDITY 100%
93	%	RELATIVE HUMIDITY 100%
94	%	RELATIVE HUMIDITY 100%
95	%	RELATIVE HUMIDITY 100%
96	%	RELATIVE HUMIDITY 100%
97	%	RELATIVE HUMIDITY 100%
98	%	RELATIVE HUMIDITY 100%
99	%	RELATIVE HUMIDITY 100%
100	%	RELATIVE HUMIDITY 100%

PRELIMINARY
11/24/98

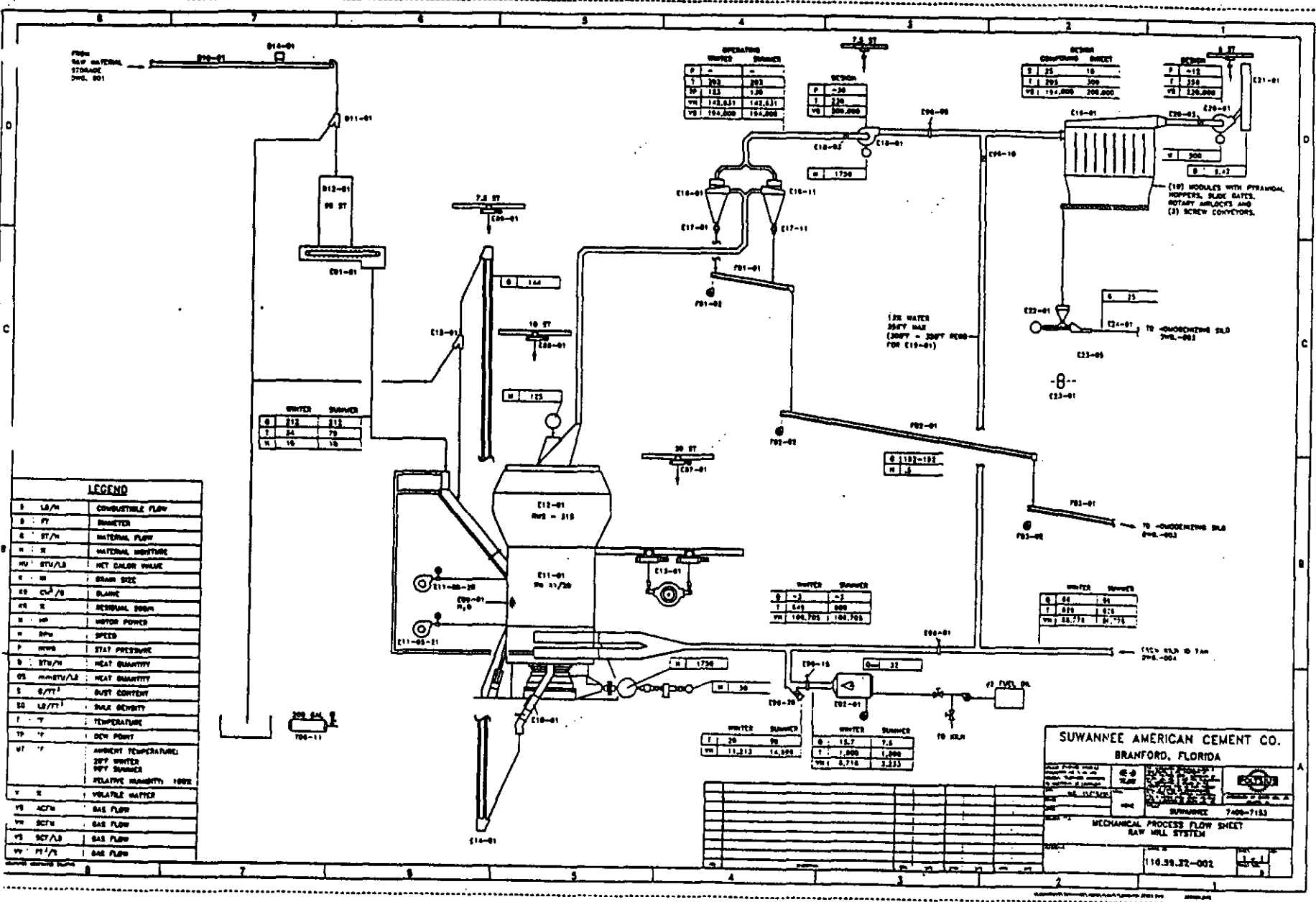
SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

MECHANICAL PROCESS FLOW SHEET
PACKING PLANT

110.59.32-008

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ATTACHMENT 2
Process Flow Diagrams – As Reconfigured



OPERATING	
WINTER	SUMMER
P 1	203
SP 1	1.20
VM 1	142,231
VM 2	124,200

SECTION	
WINTER	SUMMER
P 1	20
T 1	220
VM 1	200,200

SECTION	
WINTER	SUMMER
P 1	25
T 1	205
VM 1	194,200
VM 2	200,200

SECTION	
WINTER	SUMMER
P 1	12
T 1	250
VM 1	220,200

WINTER		SUMMER	
Q	218	213	
T	24	70	
VM	16	10	

WINTER		SUMMER	
Q	2	2	
T	249	200	
VM	100,703	100,703	

WINTER		SUMMER	
Q	24	21	
T	210	270	
VM	22,778	21,778	

WINTER		SUMMER	
P	20	20	
VM	11,212	14,200	

WINTER		SUMMER	
Q	15.7	7.5	
T	1,200	1,200	
VM	2,716	2,233	

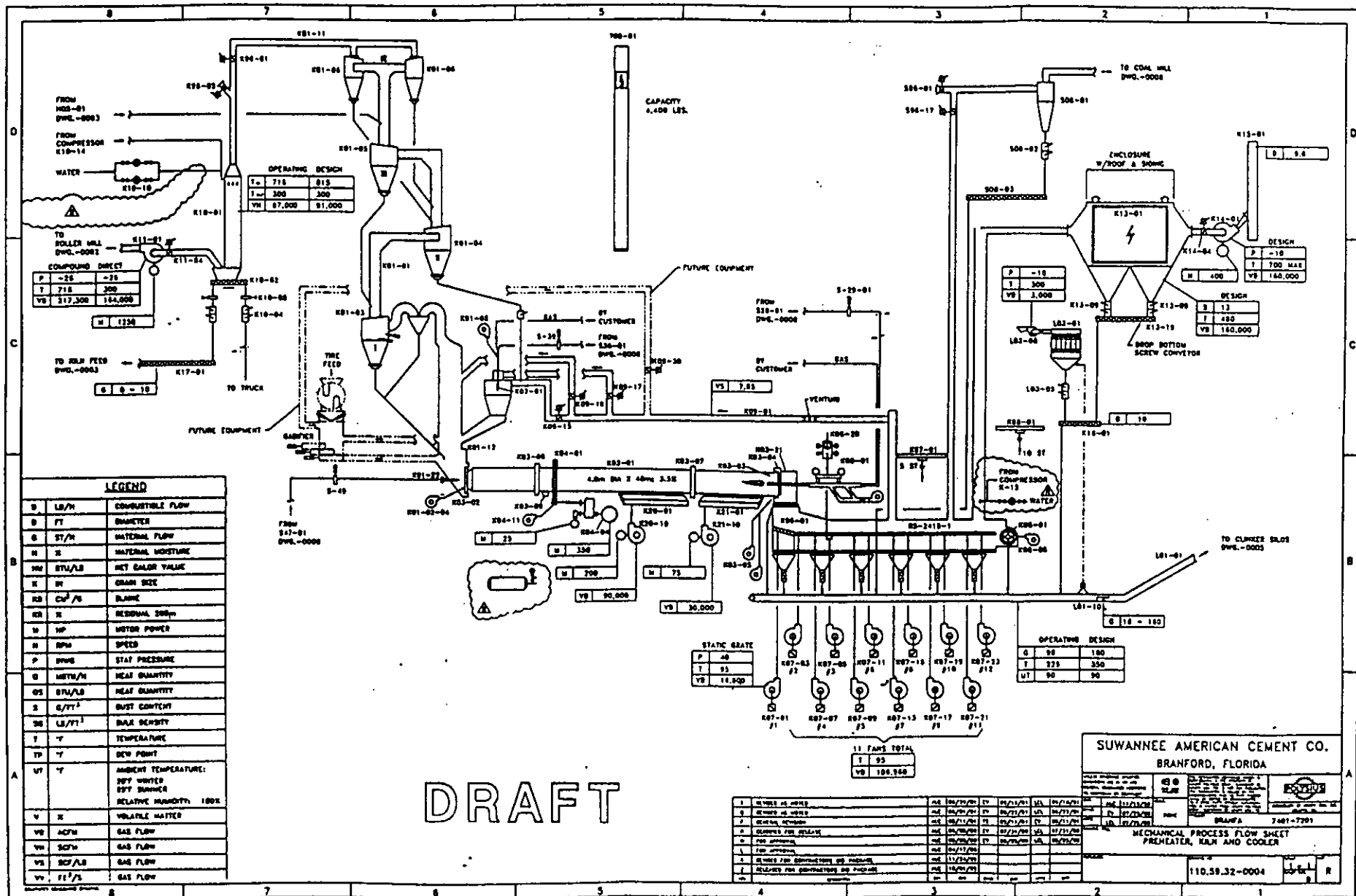
LEGEND	
Q	CU/M CONVECTIBLE FLOW
B	FT BAROMETER
Q	ST/M MATERIAL FLOW
H	% MATERIAL MOISTURE
HU	BTU/LB NET CALOR VALUE
H	IN GRIND SIZE
ED	CU ³ /S BLAKE
AR	% ACROBIAL SOON
H	HP MOTOR POWER
H	SPM SPEED
P	PSID STAT PRESSURE
Q	BTU/M HEAT QUANTITY
QS	MMBTU/LB HEAT QUANTITY
S	% DUST
SD	LB/TT ³ DUST DENSITY
T	°F TEMPERATURE
TP	°F DEW POINT
WT	°F AMBIENT TEMPERATURE
	°F WINTER
	°F SUMMER
	RELATIVE HUMIDITY 100%
V	% VOLATILE MATTER
VM	ACTM GAS FLOW
VM	SCFM GAS FLOW
VM	SCY/LB GAS FLOW
VM	PI/LB GAS FLOW

SUWANNEE AMERICAN CEMENT CO.
BRAMFORD, FLORIDA

MECHANICAL PROCESS FLOW SHEET
RAW MILL SYSTEM

SUWANNEE 7400-7183
110.59.22-002

DRAFT



LEGEND

Q	LB/H	COMBUSTIBLE FLOW
D	FT	DIAMETER
G	ST/H	MATERIAL FLOW
M	%	MATERIAL MOISTURE
HW	BTU/LB	NET CALOR VALUE
K	IN	GRAN SIZE
KD	CM ² /H	BLANK
KR	%	RESIDUAL 200m
HP	HP	MOTOR POWER
R	RPM	SPEED
P	INHG	STAT PRESSURE
Q	MBTU/H	HEAT QUANTITY
QS	BTU/LB	HEAT QUANTITY
S	G/TT ³	DUST CONTENT
SG	LB/FT ³	DALK DENSITY
T	°F	TEMPERATURE
TP	°F	DEW POINT
UT	°F	AMBIENT TEMPERATURE: 80° WINTER 85° SUMMER
V	%	RELATIVE HUMIDITY 100%
V	%	RELATIVE HUMIDITY
VB	SCFH	GAS FLOW
VH	SCFH	GAS FLOW
VS	SCF/LB	GAS FLOW
VV	FT ³ /S	GAS FLOW

DRAFT

STATIC GRATE

P	40
T	95
VB	14,500

OPERATING DESIGN

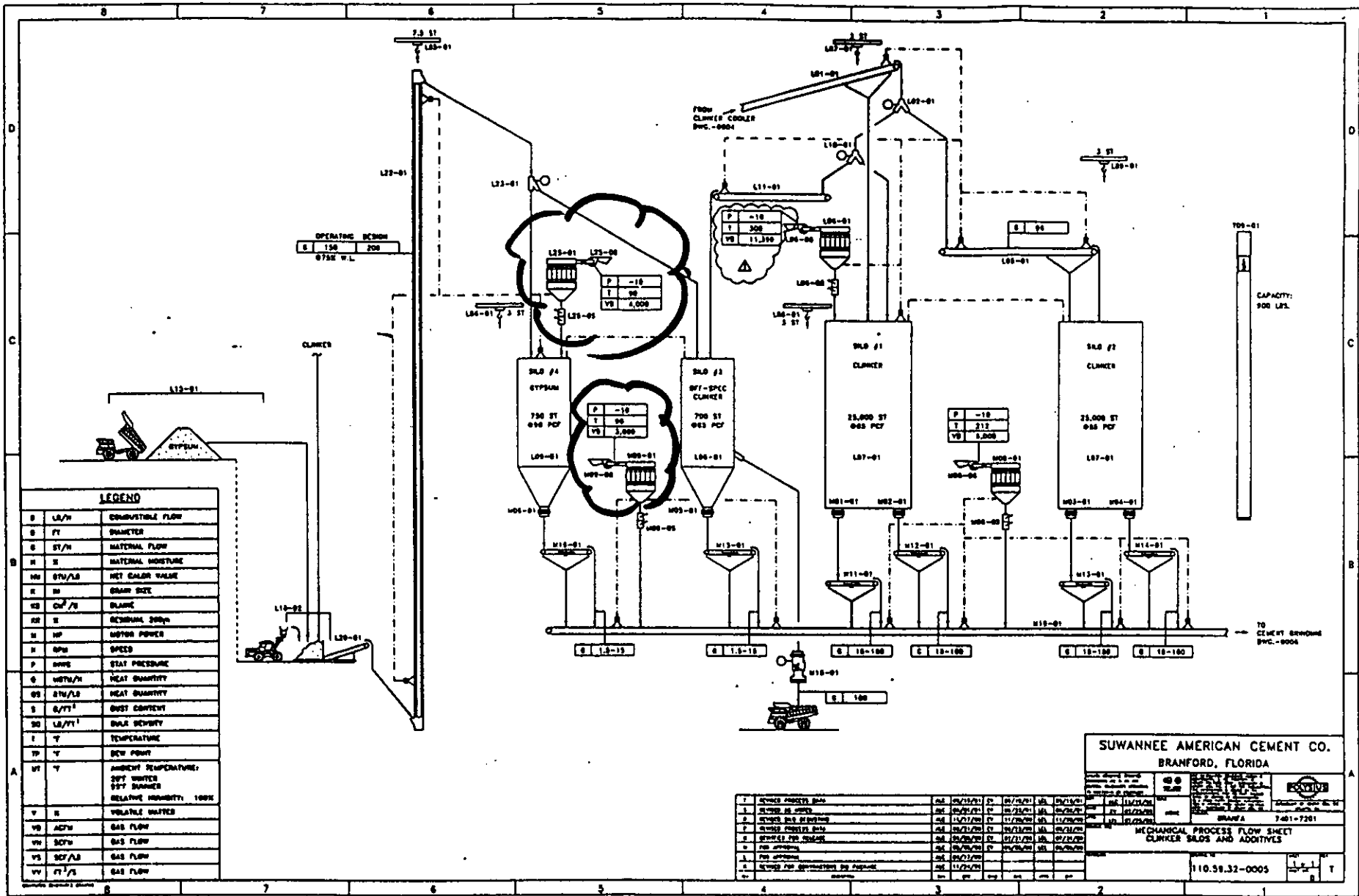
G	28	180
T	225	350
UT	90	90

1	UNITS AS SHOWN	AS	08/25/00	BY	05/15/01	SA	05/15/01
2	REVISION AS SHOWN	AS	05/22/01	BY	05/22/01	SA	05/22/01
3	DESIGN APPROVAL	AS	05/22/01	BY	05/22/01	SA	05/22/01
4	DESIGN FOR CONSTRUCTION	AS	05/22/01	BY	05/22/01	SA	05/22/01
5	FOR APPROVAL	AS	05/22/01	BY	05/22/01	SA	05/22/01
6	FOR APPROVAL	AS	05/22/01	BY	05/22/01	SA	05/22/01
7	DESIGN FOR CONSTRUCTION AS SHOWN	AS	11/25/00	BY	11/25/00	SA	11/25/00
8	DESIGN FOR CONSTRUCTION AS SHOWN	AS	10/20/00	BY	10/20/00	SA	10/20/00

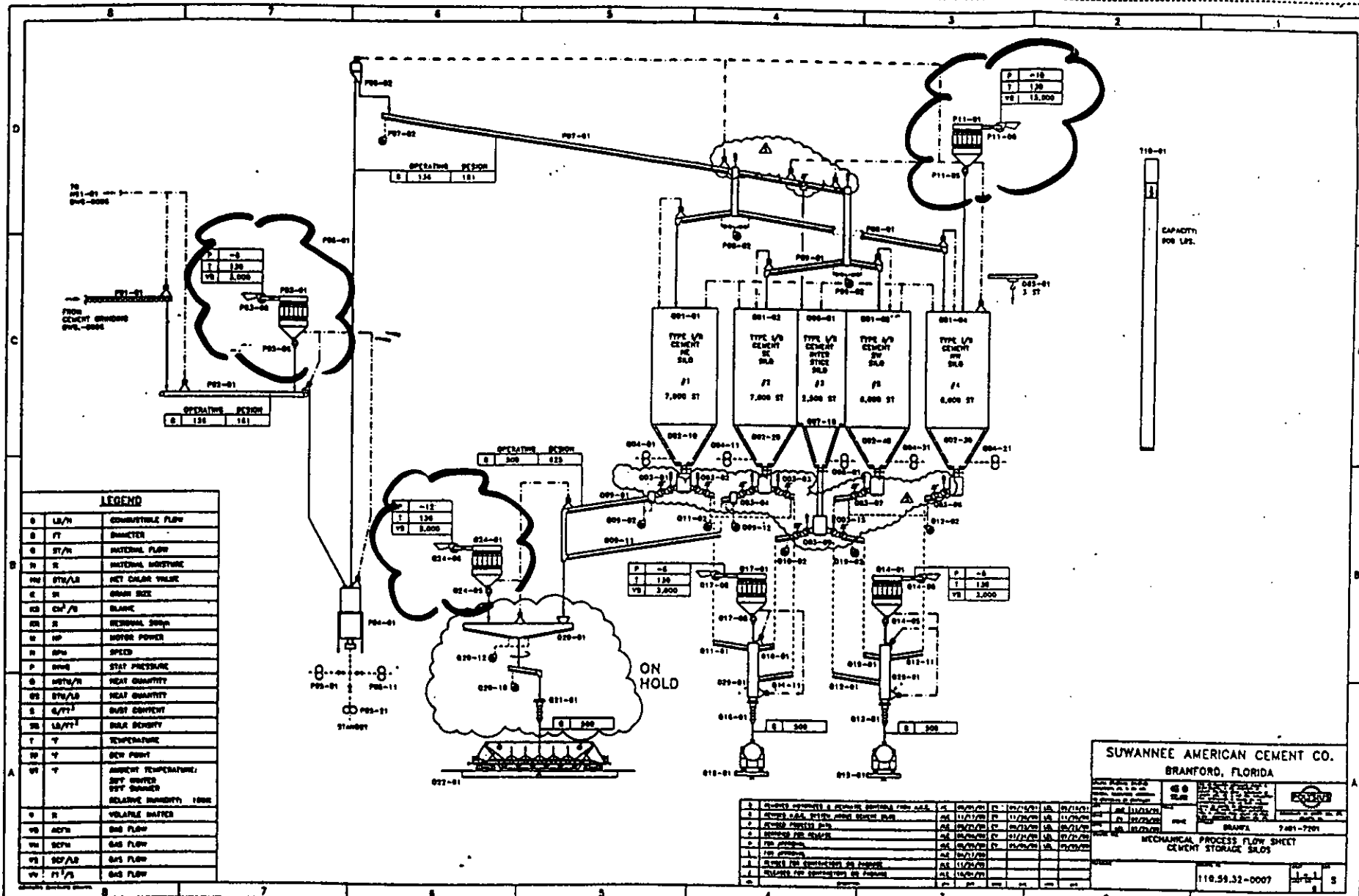
SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

MECHANICAL PROCESS FLOW SHEET
PREHEATER, RAW AND COOLER

110.59.32-0004



DRAFT



LEGEND

Q	LB/H	COMBUSTIBLE FLOW
Q	FT	DIAMETER
Q	ST/H	INTERNAL FLOW
R	%	INTERNAL MOISTURE
W	BTU/LB	NET CALOR VALUE
K	IN	ORBIT SIZE
RD	CM ² /H	BLANK
RM	R	REYNOLDS NUMBER
M	HP	MOTOR POWER
R	RPM	SPEED
P	PSIG	STAT PRESSURE
Q	MBTU/H	HEAT QUANTITY
Q	BTU/LB	HEAT QUANTITY
S	LB/FT ³	DUST CONCENT
RD	LB/FT ³	DUST CONCENT
T	°	TEMPERATURE
W	°	DEW POINT
W	°	AIRWEAT TEMPERATURE, DRY BULB
W	°	AIRWEAT TEMPERATURE, WET BULB
W	°	RELATIVE HUMIDITY, PERCENT
V	R	VARIABLE RATED
VB	ACFT	GAS FLOW
VB	SCFM	GAS FLOW
VB	SCFM	DUST FLOW
VB	FT ³ /H	GAS FLOW

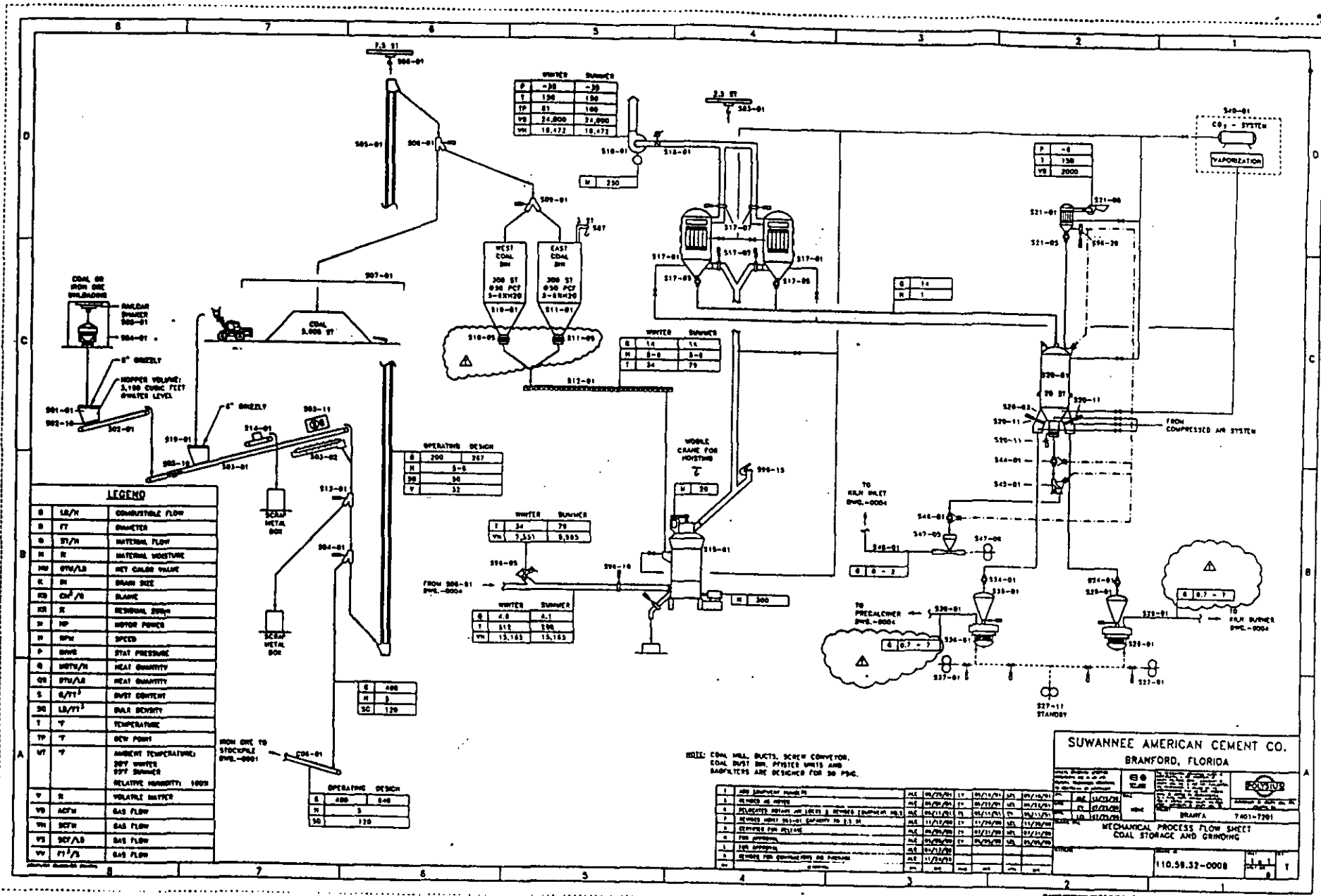
SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

1	DESIGNED BY	DATE
2	CHECKED BY	DATE
3	APPROVED BY	DATE
4	REVISIONS	

MECHANICAL PROCESS FLOW SHEET
CEMENT STORAGE SILOS

110.59.32-0007

DRAFT



LEGEND

B	LB/H	COMBUSTIBLE FLOW
B	FT	DIMENSION
Q	ST/H	INTERNAL FLOW
M	R	INTERNAL VOLUME
W	ST/LB	WEY CALOR VALUE
K	IN	DRUM SIZE
CO	CM ² /S	BLADE
OR	R	REVENOM SIZE
W	HP	MOTOR POWER
R	MPH	SPEED
P	PSIG	STAT. PRESSURE
Q	BTU/H	HEAT QUANTITY
QS	BTU/LB	HEAT QUANTITY
S	LB/FT ³	DUST CONCENT
SO	LB/FT ³	DUST CONCENT
T	°	TEMPERATURE
TP	°	SEC POINT
UT	°	AMBIENT TEMPERATURE 80° WINTER 90° SUMMER RELATIVE HUMIDITY: 100%
V	R	VOLUME MATTER
VS	ACFM	GAS FLOW
VS	SCFM	GAS FLOW
VS	SCF/LB	GAS FLOW
VS	FT ³ /S	GAS FLOW

OPERATIVE DESIGN

B	200	267
M	3-5	
SO	30	
T	37	

WINTER SUMMER

1	24	78
WV	2,551	2,885

6	4.0	0.1
T	515	598
WV	15,165	15,165

WINTER SUMMER

P	-28	-29
T	138	150
TP	81	100
WV	24,800	24,800
WV	18,472	18,472

WINTER SUMMER

P	-6	
T	138	
WV	2000	

OPERATIVE DESIGN

E	480	540
M	3	
SO	120	

NOTE: CON. MILL, DUCTS, SCREW CONVEYOR, COAL DUST BR., PYRITES UNIT AND SAMPLECTERS ARE DESIGNED FOR 50 PPM.

1	ADD EQUIPMENT	DATE	BY	REV	DATE	BY	REV	DATE	BY	REV
2	REVISION									
3	REVISION									
4	REVISION									
5	REVISION									
6	REVISION									
7	REVISION									
8	REVISION									
9	REVISION									
10	REVISION									

SUWANNEE AMERICAN CEMENT CO.
BRANFORD, FLORIDA

MECHANICAL PROCESS FLOW SHEET
COAL STORAGE AND GRINDING

BRANFORD 7401-7501

110.58.32-0008

DRAFT

ATTACHMENT 3
Dust Collector Specifications

SAC Baghouses Specifications & Design Data

Emission Control Unit		Equip. No.	Amerex Model No.	Bag Material	No. of Bags	Bag Size	Bag Area	Cloth Area	Design ACFM	A-C Ratio	Temp. Deg. F	Delta P (-) INW	Stack Dia. '
Kiln/Raw Mill (8 Comps.) *	1	E21-01	RA-35-180-D12	Fiberglass w/SGT	1,440	12" X 35'	109.96	158,337	220,000	1.39	450	12	9.42
Finish Mill, Sepol No.1 (W), **	2	N09-01	RP-12-770 D6	16 Oz. Singed Poly. DD	1540	6" X 12'	18.85	29,028	103,600	3.57	158	21	7.6
Finish Mill, Mill No.2 (E)	3	N12-01	RP-12-420 D6	16 Oz. Singed Poly. DD	420	6" X 12'	18.85	7,917	35,000	4.42	203	15	4
Finish Mill Baghouse No. 3 (S)	4	N91-01	RP-10-72 D6	16 Oz. Singed Polyester	72	6" X 10'	15.71	1,131	6,000	5.31	200	10	
<i>Fringe Cement Silo</i>	5	N36-01	RP-10-49 D6	16 Oz. Singed Polyester	49	6" X 10'	15.71	770	4,000	5.20	130	8	
Aeropol @ Homogenizing Silo	6	E28-01	RP-10-36 D6	14 Oz. Singed Nomex	36	6" X 10'	15.71	565	3,000	5.31	300	10	
<i>Off Spec. Feed Handling</i>	7	E34-01	RP-10-25 D6	14 Oz. Singed Nomex	25	6" X 10'	15.71	393	2,000	5.09	300	10	
Homogenizing Silo Inlet	8	G07-01	RP-10-182 D6	16 Oz. Singed Polyester	182	6" X 10'	15.71	2,859	15,000	5.25	200	10	
Poldos Blend Silo Outlet	9	H08-01	RP-10-25 D6	16 Oz. Singed Polyester	25	6" X 10'	15.71	393	2,000	5.09	200	10	
Coal Mill No. 1, East	10	S17-01	Merrick	16 Oz. Ept. Singed Ploy.	140	6" X 14'	21.99	3,079	12,500	4.06	150	35	
Coal Mill No. 2, West	11	S17-01	Merrick	16 Oz. Ept. Singed Ploy.	140	6" X 14'	21.99	3,079	12,500	4.06	150	35	
Coal Mill No. 3, South	12	S21-01	RP-12-35 D5	16 Oz. Singed Polyester	35	5" X 12'	15.71	550	2,000	3.64	150	6	
Clinker Cooler Conv./Breaker	13	L03-01	RP-10-36 D6	16 Oz. Singed Polyester	36	6" X 10'	15.71	565	3,000	5.31	300	10	
Clinker Silo, Inlet	14	L06-01	RP-10-140 D6	16 Oz. Singed Polyester	140	6" X 10'	15.71	2,199	6,000	2.73	300	10	
<i>Gyp/OS Clinker Transport</i>	15	L25-01	RP-10-49 D6	16 Oz. Singed Polyester	49	6" X 10'	15.71	770	4,000	5.20	90	10	
Clinker Conveyor (South)	16	M08-01	RP-10-72 D6	16 Oz. Singed Polyester	72	6" X 10'	15.71	1,131	6,000	5.31	212	10	
<i>Clinker Conveyor (North)</i>	17	M09-01	RP-10-36 D6	16 Oz. Singed Polyester	36	6" X 10'	15.71	565	3,000	5.31	90	10	
<i>Cement Transport Conveyor</i>	18	P03-01	RP-10-36 D6	16 Oz. Singed Polyester	36	6" X 10'	15.71	565	3,000	5.31	130	8	
<i>Cement Silo Input</i>	19	P11-01	RP-10-182 D6	16 Oz. Singed Polyester	182	6" X 10'	15.71	2,859	15,000	5.25	130	10	
Truck Load-out No. 1 (E)	20	Q14-01	RP-10-36 D6	16 Oz. Singed Polyester	36	6" X 10'	15.71	565	3,000	5.31	130	8	
Truck Load-out No. 2 (W)	21	Q17-01	RP-10-36 D6	16 Oz. Singed Polyester	36	6" X 10'	15.71	565	3,000	5.31	130	8	
Railcar Load-out	22	Q24-01	RP-10-56 D6	16 Oz. Singed Polyester	56	6" X 10'	15.71	880	3,000	3.41	130	8	
					Totals	4,783		217,886					

The visible emissions (VE) limit on all baghouses is 5%

* 7 Compartments (180 Bags/Compt. = 138,545 ft² Cloth Area, 1.59 AC Ratio

** - Two 770 bag units

Emission Point Design Data & Compliance Requirements

	Emission Control Unit	Equip. No.	Stack or Exist Ht.	Design Parameters			Stack I.D.	Compliance Test Parameters									
				ACFM	Temp. F	Delta P (-) INWG		VE	PM	PM10	SO2	NOx	HCL	CO	Hg	VOC	Dioxin
1	Kiln/Raw Mill Baghouse Stack	E21-01	315	220,000	450	12	9.42	X	X	X	X	X	X (1)	X	X (1)	X	X (2)
2	Clinker Cooler ESP Stack	K15-01	215	160,000	700	10	9	X	X	X							
3	Finish Mill BH Sepol No.1 (W)	N09-01	131	103,600	158	21	7.6	X	X	X							
4	Finish Mill BH-Mill No.2 (E)	N12-01	131	35,000	203	15	4	X	X	X							
5	Finish Mill Baghouse No. 3 (S)	N91-01	47	6,000	200	10		X									
6	Fringe Cement Bin	N36-01	65	4,000	130	8		X									
7	Aeropol @ Homogenizing Silo	E28-01	56	3,000	300	10		X									
8	Off Spec. Feed Handling	E34-01	50	2,000	300	10		X									
9	Homogenizing Silo Inlet	G07-01	242	15,000	200	10		X									
10	Poldos Homogenizing Silo Outlet	H08-01	50	2,000	200	10		X									
11	Coal Mill No. 1, East, Combined	S17-01															
12	Coal Mill No. 2, West, Combined	S17-01	15	25,000	150	35		X	X(1)								
13	Coal Mill No. 3, South	S21-01	67	2,000	150	6		X									
14	Clinker Cooler Con./Breaker	L03-01	37	3,000	300	10		X									
15	Clinker Silo, Inlet	L06-01	192	6,000	300	10		X									
16	Gyp/OS Clinker Transport	L25-01	82	4,000	90	10		X									
17	Clinker Conveyor (North)	M08-01	19	6,000	212	10		X									
18	Clinker Conveyor (South)	M09-01	10	3,000	90	10		X									
19	Cement Transport Conveyor	P03-01	54	3,000	130	8		X									
20	Cement Silo Input	P11-01	195	15,000	130	10		X									
21	Truck Load-out No. 1 (W)	Q14-01	29	3,000	130	8		X									
22	Truck Load-out No. 2 (E)	Q17-01	39	3,000	130	8		X									
23	Railcar Load-out	Q24-01	57	3,000	130	8		X									

Units not reflected in permit

(1) Initial testing only

(2) Dioxin - Initial & every 30 months - Compound & Direct

Stack or exist height = (emission point elevation - grade elevation)

Continuous Emission Monitor Certifications	Compliance						Process	
	Opacity	SO2	NOx	Flow	THC	em	CO	O2
Kiln/Raw Mill Baghouse Stack	X	X	X	X	X	X	X	X
Clinker Cooler ESP Stack	X							
Kiln/Raw Mill Baghouse Inlet	Temp. F							
Coal Mill Outlet	Temp. F							

Temperature device - quarterly calibration check

Process CO & O2 monitors do not require quarterly calibration check



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

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

February 18, 2003

Mr. A. Linero, P.E.
Bureau of Air Regulation
Division of Air Resource Management
Department of Environmental Protection
2600 Blair Stone Road, MS 5500
Tallahassee, Florida 32399-2400

Subject: Suwannee American Cement – Branford Cement Plant
Branford, Suwannee County, Florida
Facility ID No. 1210465
Application for Air Construction Permit

Dear Mr. Linero:

This letter transmits four (4) copies of an application for an air construction permit for the Suwannee American Cement – Branford Cement Plant. This application is being submitted to you for processing by the New Source Review Group.

During the final design of the Suwannee American Cement Company (SAC) Branford Plant, changes to preliminary design and/or reconfiguration of the preliminary design have resulted in:

1. For Emissions Unit 002, the replacement of a single emission point for particulate matter emissions by two emission points with the addition of a second fabric filter dust collector to control emissions from the added emission point. Design flow rates and design operating temperatures have also been changed for certain control devices.
2. For Emissions Unit 006, the addition of three new particulate matter emission points with associated fabric filter (baghouse) dust collectors; and
3. the reconfiguration of three other particulate matter emission points and the associated fabric filter dust collectors. Design flow rates and design operating temperatures have also been changed for certain control devices.
4. For Emissions Unit 008, a previously permitted single baghouse is being served by two baghouses with a combined exhaust and a higher flow rate.

The design changes and reconfiguration will result in a net reduction in the design air flow rate from the affected emission units. This will result in a net decrease in the permitted particulate matter emission rate from the affected emission units. The net change in PM emissions from the changes detailed in this application is a decrease of 6.7 tons per year.

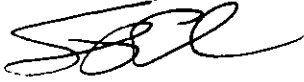
RECEIVED

FEB 24 2003

BUREAU OF AIR REGULATION

Thank you in advance for your review of this application. Please contact me if you have any questions or require additional information.

Sincerely,



Steven C. Cullen, PE
Koogler & Associates

Copy to: George Townsend – Suwannee American Cement

