Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603

August 24, 2006

053-7642

Bureau of Air Regulation
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention Mr. Alvaro Linero, P.E., South Permitting Section Administrator

RE TITAN AMERICA PENNSUCO CEMENT PLANT
DEP FILE NO. 0250020-018-AV
TITLE V RENEWAL APPLICATION

Dear Mr. Linero

Based on my conversation with Teresa Heron today, attached is an updated Title V application emission unit section for the Cement Storage, Packhouse and Loadout emission unit at Titan's Pennsuco cement plant. The purpose of the revision is to incorporate the information regarding the proposed two new baghouses on the cement truck loadout stations to control fugitive dust emissions. One baghouse (VL-002) controls the truck loadout operation for the Unit No. 2 Truck Loadout station, while the second baghouse (VL-003) controls the truck loadout operation for the Unit No. 3 Truck Loadout station. Also attached is detailed control equipment information for the two new baghouses, for insertion into the Control Equipment binder for Pennsuco.

The two new truck loadout baghouses are part of Titan's Fugitive Dust Control Plan, which is being incorporated into the Title V permit. The purpose of the baghouses is to control fugitive dust emissions from the truck loadout operation. As such, the baghouses will represent a reduction in actual particulate matter (PM) emissions, since PM emissions now released as fugitive emissions will be captured and passed through baghouse dust collectors before being vented to the atmosphere.

It is also noted that the two new baghouses are not associated with the increase in cement and clinker production at the Pennsuco plant. Therefore, the previous PSD netting analysis is not affected by the two new baghouses.

Thank you for consideration of this information. If you have any questions, please contact me at (352) 336-5600.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff, P.E., Q.E.P.
Principal Engineer
Florida PE # 19041
SEAL

DB/hm

cc: T. Lancaster, Titan America, LLC
Miami-Dade County

Y:\Projects\2005\0537642 Titan America Pennsuco\4.1\L080306-642.doc

INFORMATION FOR
CONTROL EQUIPMENT BINDER

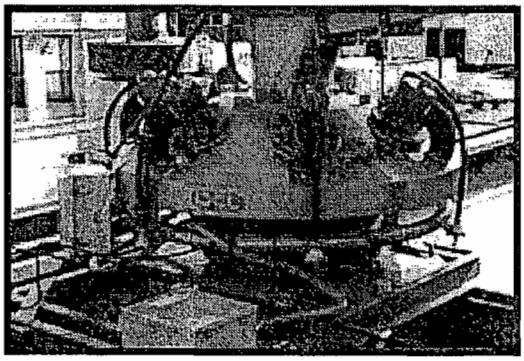
DUST CONTROL EQUIPMENT - TRUCK LOADOUT

Source Designators	Unit #2 (VL002) and Unit #3 (VL003) DC info
Control Equipment Designation	Truck Loading Baghouse
Baghouse Manufacturer	Dust Control and Loading Systems
Model Name & Number	CFM 330-1F14
Design Flow Rate (acfm)	5,000
Fabric Filter Area (ft^2)	329
Outlet Grain Loading (gr/dscf)	0.03
Maximum PM Emissions (lb/hr)	1.3 lb/hr
Pressure Drop (inches H_2O)	4" to 7"
Air To Cloth Ratio	7.31
Bag Weave	Non-woven
[3] Bag Material	Spun Bond Filter
[4] Bag Cleaning Cycle	Optional
Actual Gas Flow Rate (acfm)	2,400
Gas Temperature (Outlet-^oF)	Ambient
Gas Temperature (Inlet-^oF)	Ambient
Stack Height Above Ground (ft)	40
Exhaust Exit Diameter (ft)	0.63

Dust Control and Loading Systems, Inc.

Compact Filter Module

Downloads available:
- DXF CAD Drawing Blocks
- Equipment Manual
- Photo Gallery
- Product Literature
- Specification Drawings



Models available:
CFM155; CFM195; CFM270; CFM330; CFM470; CFM660

The CFM compact filter module is ideal for use inline at any bulk material transfer point requiring dust control. It's low profile configuration also makes the CFM the best choice for inline filtration when integrated with a DCL loading spout. The flow tube can be eliminated making this unit suitable as a bin vent for any tight headroom conditions.

When used as an inline filter, product flows through a central flow tube while isolated from the upward dust entrained airflow. The collected dust is deposited back to the material being handled making the CFM Compact Filter Module an ideal cost effective package especially when compared to a free standing dust collector utilizing duct work, discharge air lock, and often a means to convey the dust back to the system.

The exhaust fan is directly mounted to the assembly eliminating the need for a remote fan placement. The unique design provides internal velocities that are lower than what is normally expected from conventional designs resulting in less load on the filtration media. The filter elements are automatically cleaned during operation with a conventional 80 PSI pulse jet system. The unit can be provided with a final clean feature that is activated at the end of each loading cycle fully cleaning all elements, eliminating residuals.

Filter media is available to accommodate most applications. Pleated design, spun bonded media features a smooth surface finish with exceptional dust cake release. The filter surface is calendared and compacted to resist penetration by collected particulate. This results in better cleaning efficiency and faster return

to operating airflow after the cleaning cycle than is possible with traditional media.

DCL offers a large selection of compact filter modules from 155 to 660 square feet of filter media. Exhaust fans can be sized up to 5000 CFM.

A choice of construction materials allow handling of all types of products; fine, granular, lumpy, abrasive, corrosive, and sanitary applications. A choice of electrical options are also available allowing for installation in almost any environment; NEMA 4, NEMA 4X, NEMA 7, NEMA 9, 120V/220V control, 460V/415V power, etc.

[main] [product line] [downloads] [representatives] [contact/support] [site map] [webmail]

Dust Control and Loading Systems Inc

Leaders in Innovative Bulk Loading Systems Design

Compact Filter Module

APPLICATION

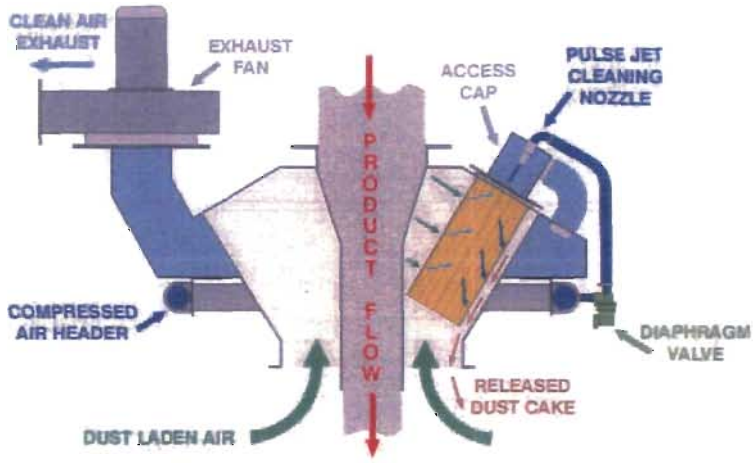
The CFM Compact Filter Module is ideal for use inline at any bulk material transfer point requiring dust control. It's low profile configuration also makes the CFM the best choice for inline filteration when intergrated with a DCL Loading Spout. The flow tube can be eliminated making this unit suitable as a bin vent for any tight headroom conditions.

When used as an inline filter, product flows through a central flow tube while isolated from the upward dust entrained airflow. The collected dust is deposited back to the material being handled making the CFM Compact Filter Module an ideal cost effective package especially when compared to a free standing dust collector utilizing duct work, discharge air lock, and often a means to convey the dust back to the system.

Filter replacement is performed without tools while accessable from the exterior of the unit.

FEATURES

The exhaust fan, up to 5000 CFM is directly mounted to the assembly eliminating the need for a remote fan placement. The unique design provides internal velocities that are lower than what is normally expected from conventional designs resulting in less load on the filtration media. The filter elements are automatically cleaned during operation with a conventional 80 PSI pulse jet system. The unit can be provided with a final clean feature that is activated at the end of each loading cycle fully cleaning all elements, eliminating residuals.



CAPACITIES

Compact Filter Modules are available in sizes from 155 to 660 square feet of filter media. Filter media is available to accommodate most applications. Pleated design, spun bonded media features a smooth surface finish with exceptional dust cake release. The filter surface is calandered and compacted to resist penetration by collected particulate. This results in better cleaning efficiency and faster return to operating airflow after the cleaning cycle than is possible with traditional media.

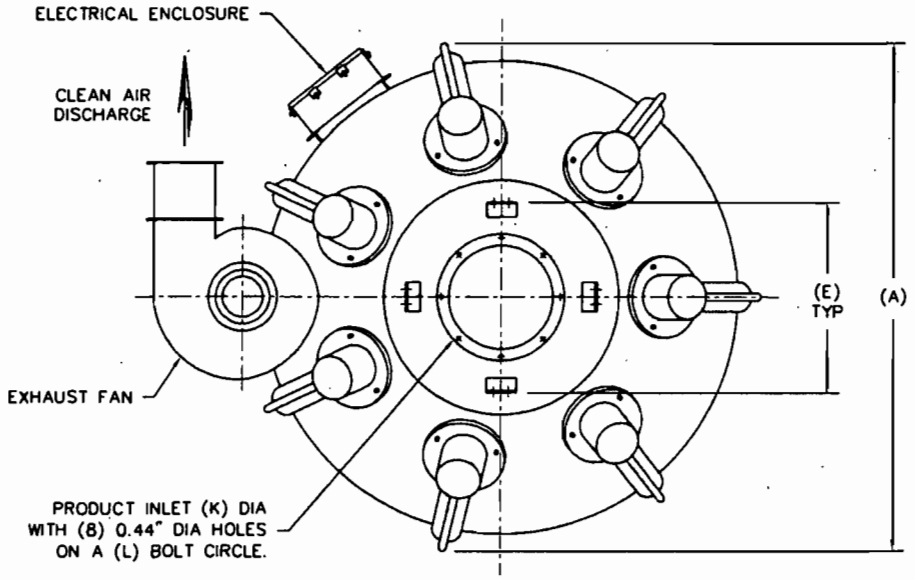
Po Box 125
08660 Ance Road

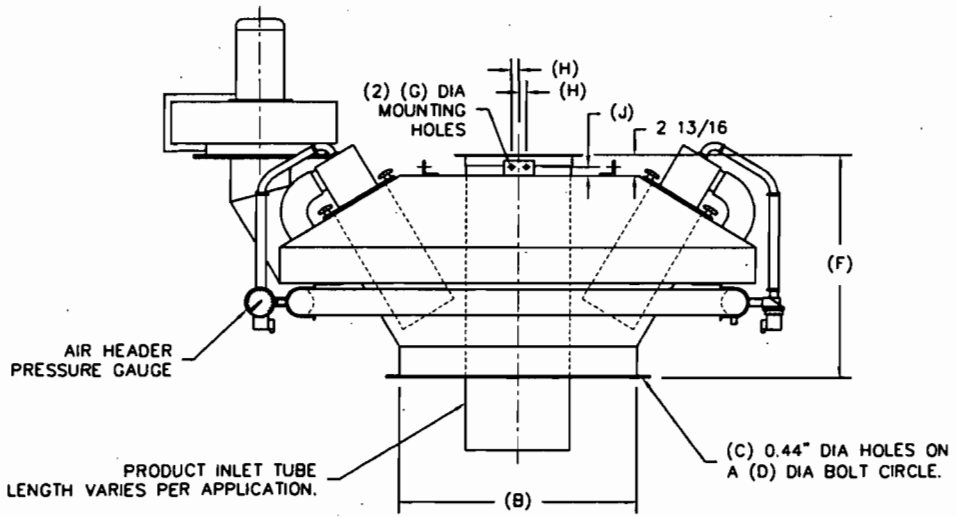
Dust Control and Loading Systems Inc
Charlevoix, Michigan 49720
www.dclinc.com or dcl-info@dclinc.com

Tele: 800-748-0563
Fax: 231-547-3343

PUBc-0499-DCFM

MODEL	EST WGT	# FILTER	CLOTH AREA	FILTER LGTH	A	B	C	D	E	F	G	H	J	K	L
CFM155	520 LB*	4	156 SQ FT	18.00	64.00	24.00	12	25.88	22.13	30.00	0.56	1.00	1.13	14.00	16.00
CFM195	520 LB*	5	195 SQ FT	18.00	64.00	24.00	12	25.88	22.13	30.00	0.56	1.00	1.13	14.00	16.00
CFM270	700 LB*	7	273 SQ FT	18.00	68.00	32.00	12	34.00	30.00	30.00	0.56	1.00	1.13	14.00	16.00
CFM330	700 LB*	7	329 SQ FT	22.00	68.00	32.00	12	34.00	30.00	30.00	0.56	1.00	1.13	14.00	16.00
CFM470	1600 LB*	10	470 SQ FT	22.00	90.00	38.00	16	40.00	45.00	43.00	0.69	3.00	2.00	16.00	18.00
CFM660	1600 LB*	14	658 SQ FT	22.00	100.00	C/F	C/F	C/F	50.00	54.50	0.75	7.00	2.00	C/F	C/F





GENERAL NOTES:

ALL INDUSTRIAL VOLTAGES AVAILABLE FOR ELECTRICAL COMPONENTS.

PREWIRING OF ELECTRICAL COMPONENTS TO CFM HOUSING JUNCTION BOX OPTIONAL.

ELECTRICAL ENCLOSURES NEMA 4 STANDARD. NEMA 4X, 7, AND 9 OPTIONAL.

METAL SURFACES ARE POWER TOOL CLEANED, PRIMED, AND FINISHED WITH INDUSTRIAL ENAMEL.

AIR REQUIREMENTS FOR COMPRESSED AIR HEADER ARE (16) CFM @ (80–100) PSI.

SPECIFICATIONS AND/OR DIMENSIONAL DATA ARE SUBJECT TO CHANGE. CONSULT DCL FOR CERTIFIED DRAWINGS.

C/F = CONSULT FACTORY

*ESTIMATED WEIGHTS DO NOT INCLUDE EXHAUST FAN.

REV	DATE	BY
C	04-23-02	JNM
B	09-28-00	JNM
A	10-16-97	JNM

DCL
SPECIALISTS IN ADVANCED DESIGN LOADING SYSTEMS

P.O. BOX 123
CHARLEVOIX, MICHIGAN 49720
(231) 547-5600

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONAL ± 1/16" DECIMAL ±.06 ANGULAR ± 1/2

DRAWN BY: JNM
CHECKED BY: ENG
SCALE: NONE
DATE: 03-04-97

TITLE: CFM COMPACT FILTER MODULE

DRAWING No: CFM-10001

REVISED EMISSION UNIT
INFORMATION SECTION

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

EMISSIONS UNIT INFORMATION
Section [6]
Cement Storage, Packhouse & Loadout

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ 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.

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).

☒ 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. Description of Emissions Unit Addressed in this Section:
Cement Storage Silos 1-12, Packhouse & Bulk Loadout Units 1-3

3. Emissions Unit Identification Number: **014, 015, and 016**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**Jan. 2003***	**June 2004***	**32**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
Emission unit consists of Cement Storage Silos (EU 014), Cement Distribution Rail/Truck Loadout Unit Nos. 1, 2, and 3 (EU 015), and Cement Packhouse (EU 016).

*** For new Cement Storage Silos. Date is March 2005 for new Packhouse Commence Construction, and Sept. 2005 for new Packhouse Startup Date.**

EMISSIONS UNIT INFORMATION
Section [6]
Cement Storage, Packhouse & Loadout

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   Baghouses (15)

   Process Enclosures

2. Control Device or Method Code(s): **018, 054**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **500 TPH**	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

Maximum process rate is a 24-hour block average and is limited by Permit No. 0250020-017-AC/PSD-FL-360. See Attachment TM-EU6-B6 for maximum individual process rates.

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU 014, 015, 016**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **15 baghouses. See Attachment TM-EU6-C15.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **200** feet	7. Exit Diameter: **1** feet
8. Exit Temperature: **200** °F	9. Actual Volumetric Flow Rate: **18,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Stack parameters are for Baghouse F-511. Refer to Attachment TM-EU6-C15 for stack parameters of other baghouses.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Mineral Products; Cement Manufacturing Dry Process; Cement storage silos**		
2. Source Classification Code (SCC): **3-05-006-18**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **500**	5. Maximum Annual Rate: **4,380,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Hourly rate refers to process input rate to each cement silo as stated in Permit No. 0250020-017-AC/PSD-FL-360.** **Annual rate = 500 TPH x 8,760 hr/yr = 4,380,000 TPY.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Mineral Products; Cement Manufacturing Dry Process; Cement Loadout**		
2. Source Classification Code (SCC): **3-05-006-19**	3. SCC Units: **Tons Cement Produced**	
4. Maximum Hourly Rate: **500**	5. Maximum Annual Rate: **4,380,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Hourly rate refers to each cement loadout operation as stated in Permit No. 0250020-017-AC/PSD-FL-360. Packhouse production rate limited to 170 tons/hr.**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	054	018	NS
PM_{10}	054	018	NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **8.3** lb/hour **36.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 gr/acf** Reference: **Manufacturer Info.**	7. Emissions Method Code: **5**
8. Calculation of Emissions: **See Attachment TM-EU6-F1.8.**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **8.3** lb/hour **36.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.01 gr/acf** Reference: **Manufacturer Information**	7. Emissions Method Code: **5**
8. Calculation of Emissions: **See Attachment TM-EU6-F1.8.**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Monthly VE test using EPA Method 22. EPA Method 9 if visible emissions are observed during Method 22 testing.**	
5. Visible Emissions Comment: **Permit No. 0250020-017-AC/PSD-FL-360.**	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual VE test, EPA Method 9**	
5. Visible Emissions Comment: **40 CFR 63.1348.**	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	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:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	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:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **TM-EU6-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **TM-EU6-I3** ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **TM-EU1-I5** ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   ☒ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [6]
Cement Storage, Packhouse & Loadout

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: ____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: ____ ☒ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: ____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **TM-EU6-IV1** ☐ Not Applicable
2. Compliance Assurance Monitoring
   ☒ Attached, Document ID: **CAM Plan** ☐ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: ____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: ____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID: ____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID: ____
      ☐ Previously Submitted, Date: ____
   ☒ Not Applicable

Additional Requirements Comment

ATTACHMENT TM-EU6-B6

INDIVIDUAL MAXIMUM PROCESS RATES FOR CEMENT/STORAGE/PACKHOUSE

ATTACHMENT TM-EU6-B6
INDIVIDUAL MAXIMUM PROCESS RATES FOR CEMENT STORAGE/LOADOUT/PACKHOUSE
(EU 014, 015, AND 016)

Source	EU ID	Maximum Operating Hours (hr/yr)	Maximum Process Rate	
			TPH[a]	TPY[b]
Cement Silos 1-6	014	8,760	500	4,380,000
Cement Silos 7-9	014	8,760	500	4,380,000
Cement Silo 10-12	014	8,760	500	4,380,000
Bulk Loadout Unit 1	015	8,760	500	4,380,000
Bulk Loadout Unit 2	015	8,760	500	4,380,000
Bulk Loadout Unit 3	015	8,760	500	4,380,000
Packhouse	016	8,760	170	1,489,200

[a] Represents maximum process input rate for EU 014 and 015; represents maximum production rate for EU 016.

[b] Represents hourly process rate times 8,760 hr/yr.

ATTACHMENT TM-EU6-C15

SUMMARY OF STACK PARAMETER DATA

ATTACHMENT TM-EU6-C15
SUMMARY OF STACK PARAMETER DATA
CEMENT STORAGE/LOADOUT/PACKHOUSE BAGHOUSES

Emission Unit	Baghouse ID No.	Stack Height (ft)	Stack Diameter[a] (ft)	Exhaust Flow Rate (acfm)	Exhaust Temperature (°F)
Cement Silos 1-6	F-511	200	1	18,000	200
Cement Silos 7-9	F-512	200	1	10,000	200
Cement Silo 10	F-513	200	1	5,000	200
Cement Silo 11	F-514	200	1	5,000	200
Cement Silo 12	F-515	200	1	5,000	200
Bulk Loadout - Unit 1	B-210	30	1	2,500	200
Bulk Loadout - Unit 2	B-110	30	1	2,500	200
Bulk Loadout - Unit 2	VL002	40	0.63	2,400	90
Bulk Loadout - Unit 3	B-372	12	1	2,000	200
Bulk Loadout - Unit 3	B-374	12	1	2,000	200
Bulk Loadout - Unit 3	B-382	86	1	5,100	200
Bulk Loadout - Unit 3	VL003	40	0.63	2,400	90
Packhouse	BF-120	30	1.5	4,000	200
Packhouse	BF-200	60	1.5	6,200	200
Packhouse	BF-400	6	1.5	15,000	200

[a] Stack for baghouses B-110 and B-210 are circular; all other baghouse stacks are rectangular. For rectangular stacks, approximate effective stack diameter is shown.

ATTACHMENT TM-EU6-F1.8

EMISSION CALCULATIONS

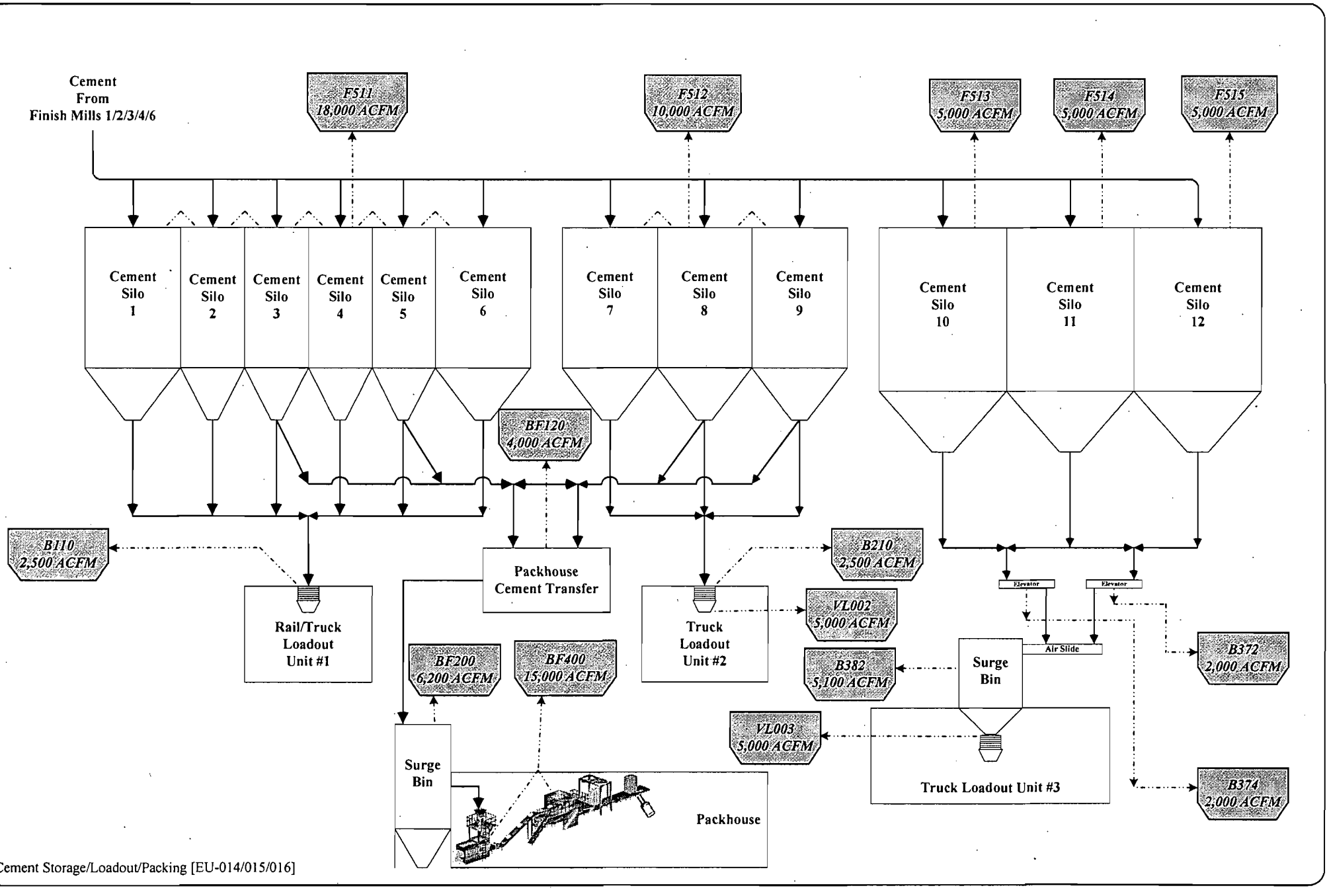
ATTACHMENT TM-EU6-F1.8
CEMENT STORAGE/LOADOUT/PACKHOUSE (EU ID NOS. 014, 015, AND 016)
POTENTIAL EMISSION RATES

Emission Unit	Baghouse ID No.	Operating Hours (hr/yr)	Exhaust Flow Rate (acfm)	Potential PM/PM10 Emission Rate[a]		
				gr/acf	lb/hr	TPY
Cement Silos 1-6	F-511	8,760	18,000	0.01	1.54	6.76
Cement Silos 7-9	F-512	8,760	10,000	0.01	0.86	3.75
Cement Silo 10	F-513	8,760	5,000	0.01	0.43	1.88
Cement Silo 11	F-514	8,760	5,000	0.01	0.43	1.88
Cement Silo 12	F-515	8,760	5,000	0.01	0.43	1.88
Bulk Loadout - Unit 1	B-110	8,760	2,500	0.01	0.21	0.94
Bulk Loadout - Unit 2	B-210	8,760	2,500	0.01	0.21	0.94
Bulk Loadout - Unit 2	VL002	8,760	2,400	0.03	0.62	2.70
Bulk Loadout - Unit 3	B-372	8,760	2,000	0.01	0.17	0.75
Bulk Loadout - Unit 3	B-374	8,760	2,000	0.01	0.17	0.75
Bulk Loadout - Unit 3	B-382	8,760	5,100	0.01	0.44	1.91
Bulk Loadout - Unit 3	VL003	8,760	2,400	0.03	0.62	2.70
Packhouse	BF-120	8,760	4,000	0.01	0.34	1.50
Packhouse	BF-200	8,760	6,200	0.01	0.53	2.33
Packhouse	BF-400	8,760	15,000	0.01	1.29	5.63
			Potential Emission Rates =		**8.29**	**36.30**

[a] PM_{10} emission rate calculated as 100 percent of PM emissions.

ATTACHMENT TM-EU6-I1

PROCESS FLOW DIAGRAM



DESCRIPTION Attachment TM-EU6-I1 Process Flow Diagram	TITLE: PENNSUCO CEMENT FILENAME: 0537642/4.1/082406/PlotPlans.vsd LAST REVISION DATE: 8/24/2006	LEGEND Air Flow Solid Matter

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ATTACHMENT TM-EU6-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT TM-EU6-I3

CONTROL EQUIPMENT INFORMATION FOR CEMENT STORAGE AND LOADOUT BAGHOUSES

Source ID	Baghouse ID	Manufacturer	Model No.	Number of Bags	Flow Rate (acfm)	Cloth Area (ft^2)	Air to Cloth Ratio
Cement Silos 1-6	F-511	BHA	-	156	18,000	1,625	11.1
Cement Silos 7-9	F-512	BHA	-	156	10,000	2,142	4.7
Cement Silo 10	F-513	Mikropul	121S-10-20B	121	5,000	1,424	3.5
Cement Silo 11	F-514	Mikropul	121S-10-20B	121	5,000	1,424	3.5
Cement Silo 12	F-515	Mikropul	121S-10-20B	121	5,000	1,424	3.5
Bulk Loadout Unit 1	B-210	BHA	-	72	2,500	1,591	1.6
Bulk Loadout Unit 2	B-110	BHA	-	72	2,500	1,591	1.6
Bulk Loadout Unit 2	VL-002	DCL	CFM 330-1F14	7*	2,400	329	7.3
Bulk Loadout Unit 3 Line 1	B-372	Mikropul	36S-8-30-C	36	2,000	340	5.9
Bulk Loadout Unit 3 Line 2	B-374	Mikropul	36S-8-30-C	36	2,000	340	5.9
Bulk Loadout Unit 3 Airslide	B-382	Mikropul	121S-10-20C	121	5,100	1,424	3.5
Bulk Loadout Unit 3 Airslide	VL-003	DCL	CFM 330-1F14	7*	2,400	329	7.3
Packhouse	BF-120	FLS Airtech	100TA8	100	4,000	1,047	3.8
Packhouse	BF-200	FLS Airtech	144TA8	144	6,200	1,508	4.1
Packhouse	BF-400	FLS Airtech	304C10	304	15,000	3,958	3.8

* Number of cartridge filters.

DCL = Dust Control and Loading Systems, Inc.

ATTACHMENT TM-EU6-IV1

LIST OF APPLICABLE REGULATIONS

ATTACHMENT TM-EU6-IV1

LIST OF APPLICABLE REGULATIONS FOR THE CEMENT STORAGE, LOADOUT, AND PACKHOUSE

62-297.620(4), F.A.C. – 5-percent Opacity Limit in Lieu of Stack Testing

40 CFR 63.1342 – NESHAPs Subpart LLL – Standards: General

40 CFR 63.1348 – NESHAPs Subpart LLL – Material Handling Sources Opacity Limit

40 CFR 63.1349 – NESHAPs Subpart LLL – Performance Testing

40 CFR 63.1350 – NESHAPs Subpart LLL – Monitoring

40 CFR 63.1351 – NESHAPs Subpart LLL – Compliance Dates

40 CFR 63.1356 – NESHAPs Subpart LLL – Exemption from NSPS

40 CFR 63 – NESHAPs Subpart A – General Provisions

SEE PERMIT NO. 0250020-017-AC/PSD-FL-360

IN ATTACHMENT TM-EU1-IV1

ATTACHMENT TM-EU1-IV1

LIST OF APPLICABLE REGULATIONS FOR THE COAL HANDLING SYSTEM

40 CFR 60.11(b) – General NSPS Requirements

40 CFR 60.11(c) – General NSPS Requirements

40 CFR 60.11(d) – General NSPS Requirements

40 CFR 60.12 – General NSPS Requirements

40 CFR 60.19 – General NSPS Requirements

40 CFR 252(c) – NSPS Subpart Y – Opacity Limitations

40 CFR 60.254(a) – NSPS Subpart Y – Test Methods and Procedures

40 CFR 60.254(b)(2) – NSPS Subpart Y – Test Methods and Procedures

40 CFR 60.7 – General NSPS Requirements

40 CFR 60.8 – General NSPS Requirements

62-296.320(4)(a) – Process Weight Table