Teresa A. Moaule AB 172 Tormac. To

Tarmac America LLC 11000 N.W. 121 Way Medley, FL 33178 Phone: (305) 200-1655 Fax: (305) 364-2288

Project # 0250020-035-AC

APR 22 2013

RECEIVED

www.titanamerica.com DIVISION OF AIR
RESOURCE MANAGEMENT

April 19, 2013

Mr. Jeff Koerner Office of Permitting and Compliance Florida Dept. of Environmental Regulation 2600 Blair Stone Road, MS 5500 Tallahassee, Florida 32399-2400

RE: Air Construction Permit Application

Tarmac America LLC; Facility ID: 0250020

Dear Mr. Koerner:

Enclosed are this cover letter and four (4) copies of an application for an air construction permit at the Tarmac America LLC Pennsuco Complex. This construction permit application requests a number of changes that includes active operation and construction permits conditions clarifications and revisions, physical modifications, equipment replacement and general activities. In summary, the application requests to:

- 1) Modify kiln NOx limit to reflect the basis of the limit Prevention of Significant Deterioration (PSD) program,
- 2) Construct a conveyor to allow the injection of stored clinker pile materials into the clinker cooler system, (Based on a Request of Additional Information (RAI) issued by RER on February 6, 2012, this modification is now submitted in the context of a construction permit under a specified Emission Unit (EU027).),
- 3) Replace the Finish Mill No. 4 dust collector (Baghouse I.D. F-432) with two existing but unused Mikropul (I.D. F-603 and F-604) dust collectors,
- 4) Address certain insignificant emissions including use of an on-site laboratory dust collector and railcar painting (A request for painting has previously been submitted but, additional information was requested in the RAI dated February 6, 2012. As such, that additional information is provided.),
- 5) Clarify that whole tires in addition to shredded tire and tire-derived fuel that may be used in the pyroprocessing system under the authority of air construction permit, 0250020-031-AC (It is requested that the preceding tire feed rate established in 0250020-029-AC be removed. Tarmac requests the Department clarify that 0250020-031-AC is the applicable AC permit in regards to the use of tires and tire derived fuel in the fuel feed rate.),
- 6) Revise the current TV permit (Section B.3.b.) such that the use of limestone residuals as a raw material supplement is not limited to certain suppliers (e.g., Miami-Dade County Water Treatment Plants).



Please feel free to contact myself at (561) 248-9626 or via email at mkhan@titanamerica.com if you have any questions regarding this submittal. I sincerely appreciate your time and consideration for this project.

Regards,

Muhammad Khan, E.I. Environmental Manager

Tarmac America LLC

Teresu H. Medale AB172

#### RECEIVED

**AIR CONSTRUCTION PERMIT APPLICATION** 

APR 2 2 2013

TARMAC AMERICA, LLC

DIVISION OF AIR RESOURCE MANAGEMENT

**FACILITY ID: 0250020** 

Tarmac (1

project #
0250020-035-AC\_

#### PREPARED FOR:

Tarmac America LLC Pennsuco Complex 11000 NW 121 Way Medley, FL 33178

#### PREPARED BY:

Koogler and Associates, Inc. 4014 NW 13<sup>th</sup> St. Gainesville, FL 32609

Submission Date: March 22, 2013

654-12-12

#### **Attachment 1**

Tarmac America, LLC
Facility ID: 0250020
Air Construction Permit Application for a Variety of Construction Activities and
Changes to the Current Operation Permit

#### **Table of Contents**

Exe	cutive Summary	2
	Modification of NOx Limit (EU028)	
	Clinker Conveyor Line (EU027)	
	Replacement of Finish Mill No. 4 Dust Collector (EU013)	
-	Insignificant Activities (EU031)	
	Use of Tires in Pyroprocessing System (EU028)	
-	Limestone Residuals Requirement (EU028)	
- /	(======================================	

#### **EXECUTIVE SUMMARY**

Tarmac America LLC (Tarmac) owns and operates a Portland cement plant located in Miami, Florida, designated as part of the Pennsuco Complex. The cement plant includes one dry-process preheater/precalciner (PH/PC) kiln and clinker cooler capable of producing 2,190,000 tons per year (TPY) of clinker. The Pennsuco Complex currently operates under Title V (TV) Operating Permit 0250020-033-AV, issued by the Florida Department of Environmental Protection (DEP).

This construction permit application requests a number of changes that includes active operation and construction permits conditions clarifications and revisions, physical modifications, equipment replacement and general activities. In summary, the application requests to:

- 1) Modify kiln NOx limit to reflect the basis of the limit Prevention of Significant Deterioration (PSD) program,
- 2) Construct a conveyor to allow the injection of stored clinker pile materials into the clinker cooler system, (Based on a Request of Additional Information (RAI) issued by RER on February 6, 2012, this modification is now submitted in the context of a construction permit under a specified Emission Unit (EU027).),
- 3) Replace the Finish Mill No. 4 dust collector (Baghouse I.D. F-432) with two existing but unused Mikropul (I.D. F-603 and F-604) dust collectors,
- 4) Address certain insignificant emissions including use of an on-site laboratory dust collector and railcar painting (A request for painting has previously been submitted but, additional information was requested in the RAI dated February 6, 2012. As such, that additional information is provided.),
- 5) Clarify that whole tires in addition to shredded tire and tire-derived fuel that may be used in the pyroprocessing system under the authority of air construction permit, 0250020-031-AC (It is requested that the preceding tire feed rate established in 0250020-029-AC be removed. Tarmac requests the Department clarify that 0250020-031-AC is the applicable AC permit in regards to the use of tires and tire derived fuel in the fuel feed rate.),

6) Revise the current TV permit (Section B.3.b.) such that the use of limestone residuals as a raw material supplement is not limited to certain suppliers (e.g., Miami-Dade County Water Treatment Plants).

The following text will describe each of these summary topics in greater detail and discuss the rule applicability of each modification, change or activity at the Pennsuco Complex.

#### 1) Modification of NOx Limit (EU028)

Tarmac completed construction of a new modern PH/PC kiln in 2005 following agreement with Dade County in 1998. The new kiln replaced an older kiln which significantly reduced NOx emissions and allowed Tarmac to increase production while "netting" out of PSD significant thresholds for NOx emissions. Tarmac had several AC permits that all include netting of emissions to ensure NOx emissions did not trigger significant PSD thresholds. The most recent AC permit 0250020-017-AC applied netting to set the NOx limit and avoid PSD. The current permit states in specific condition B.6 the table that specifies the pollutant emission "Limit Basis." For NOx the table correctly states: "PTE, Avoid PSD." In the application for the permit 0250020-017-AC, the netting was for an increase of 2,376 ton per year (TPY) and a net reduction of 2,344 TPY, resulting in a net increase of 32 TPY, which is less than the significant threshold of 40 TPY for NOx. This AC permit set two NOx limits, which were based to have been based on avoiding the PSD program, at 720 lb/hr (24-hr average) and 2.17 lb/mmton clinker (12-month average). The current NOx limit and monitoring, as stated in the current TV permit, is only required due to the PSD program and related netting of emissions.

Because the limitation on NOx emissions is based <u>only</u> on the PSD program, Tarmac is requesting that the NOx limit be based on the correct averaging basis to determine compliance with the PSD program – a ton per year basis. Tarmac believes that FDEP rule requires that compliance to the PSD program be based on 2,376 tons per year (12-month period) of NOx emissions. This limit is equivalent to the current limit of 2.17 lb of NOx per ton of clinker at capacity 2.19 mmton clinker per year and is more restrictive than the current limit of 720 lb/hr at 8760 hr per year (3,153 TPY)

The following chart is provided as reference of the history of permitting of NOx emissions.

	(Revised Draft - 8/25/2012)							
Date	Permit No.	Clinker and NOx Limits	NOx Compliance	Comment				
1998	Agreement	n/a	Tarmac was required under an agreement with Dade County to comply with lower BACT limits on existing kilns or construct a new dry kiln; construction was to be completed within 36 months of permit issuance. There are no conditions of the agreement establishing limits or monitoring requirements for the new dry kiln.					
4/28/99	#8 AC Issued by DERM	160 TPH clinker 1.24 M TPY clinker  NOx: 720 lb/hr 24-hr avg 4.5 lb/ton 24-hr avg 3.15 lb/ton annual avg  Basis: Vendor design PSD not triggered	CEMS: Every day, the 24-hour average NOx emission rate for the previous day shall be calculated. Emissions shall be calculated in pounds per hour and pounds per ton of clinker. Averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two emission measurements are recorded at least 15 minutes apart. The CEMS is to be certified and operate in compliance with 40 CFR 60 Appendix F, and Appendix B. Performance Specs 1, 2, 3. A detailed report is required when the monitoring system downtime is 5% or greater of the total monitored operating hours.  While not referenced in the permit – the 3.15 lb/ton of clinker limited the unit to 1.953 TPY of NOx.	June 30, 1998 application: proposed limit of 2 lb/mmBtu, using EPA Method 7 for compliance; equivalent to 504 lb/hr and 1,953 TPY  Emission factor: 3.15 lb/ton clinker x 160 TPH clinker – 504 lb/hr; 3.15 lb/ton clinker x 1.24 million tons clinker = 1,953 TPY  Noted that unit was synthetically limited.				
5/01/01	#10 AC (Replacing #8 AC) Issued by DERM For increase in annual clinker production rate.	250 TPH clinker 1.643 M TPY clinker  NOx: -1,953 TPY, 12 month rolling average - 720 lb/hr 24-hr avg, - 2.88 lb/ton 24-hr avg, 250 TPY clinker -3.46 lb/ton 24-hr avg, 208 TPY clinker (Note: 720 lb/hour x 8760 hours = 3,153 TPY)  Basis: 62.4.070(3) reasonable assurance And 62-212.400, F.A.C. (probably PSD applicability – not BACT)	CEMS: The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.  (Compliance tests in November of 2004 indicated a rate of 2.00 lb/ton while producing 222.5 TPH of clinker.)  CEMS to be installed and certified in accordance with 40 CFR 63 Subpart A. If the CEMS downtime for the reporting period is ten percent or greater of the total operating time, a continuous monitoring system performance report must be submitted. (references to 40 CFR Part 63)	Nov. 14, 2000 application proposed a limit of 2.38 lb/ton of clinker, equivalent to 720 lb/hr and 1,953 TPY  3.46 lb/ton clinker 24-hr avg 2.38 lb/ton annual avg  Based on current hourly permit limit and equivalent annual emissions (indicating desire to limit annual emissions)  Note that unit was synthetically limited.				

	The kiln opera	ated under #10 AC through	issuance of #16 AC in 2005	
05/31/05	#16 AC (Replacing #10 AC) Issued by DEP  To adjust physical and operating parameters of new system and shut down of other systems.  Primarily PM issues.	250 TPH clinker 1.643 M TPY clinker  NOx: -1,953 TPY, 12 month rolling average - 720 lb/hr 24-hr avg - 2.88 lb/ton 24-hr avg at 250 TPY clinker -3.46 lb/hr 24-hr avg at 208 TPH clinker (Note: 720 lb/hour x 8760 hours = 3,153 TPY)  Basis: Permit #10 AC	CEMS: The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.  No changes to CEMS certification requirements – therefore still tied to Part 63 and references to 10% downtime reports.	Increase of 1,953 TPY NOx Decrease of 2,284 TPY NOx Net decrease of 331 TPY  PSD not triggered for NOx for this project.  Application requested limits of: 720 lb/hr, 24-hour average 2.1 lb/ton clinker using CEMS for compliance.  2.88 lb NOx/ton clinker x 250 TPH = 720 lb/hr  2.1 lb NOx/ton clinker x 2.19 million TPY clinker = 2,300 TPY NOx
12/02/05	PSD was not triggered #17 AC	250 TPY clinker	CEMS: Compliance with the short-term emission limits for NOx is based on a 24-hour	Increase of 2,376 TPY NOx
	(Replacing #16) For increase in annual clinker production.	2.19 M TPY clinker  NOx: -720 lb/hr 24-hr avg -2.17 lb/ton 12 months  Basis: Avoid PSD	block average. The 24-hour block average shall be the average of all valid hourly average values available during the 24-hour block.  Compliance with the long-term NOx emission limit shall be based on a 12 month rolling average that shall be recomputed each month as the arithmetic average of that month and the preceding 11 months. Each monthly average shall be computed by averaging all valid hourly averages occurring within each calendar month. The first 12 month period shall commence on January 1, 2006.  CEMS shall be certified in accordance with 40 CFR 60 Appendix B; the systems shall also comply with the requirements for CEMS found in the general provisions of 40 CFR 63 Subpart A. CEMS system valid hourly averages shall be obtained for at least 95 percent of the operating hours for which the plant is producing clinker. If the CEM system does not obtain valid hourly averages for 90 percent or more of the operating hours per semiannual period for which the plant is producing clinker, the permittee must submit a CEM performance report with the excess emissions report. No basis is provided (other than maybe 62-4.070(3), FAC – reasonable assurances).  During periods when CEM system data are not obtained in excess of five percent of the total operating hours per calendar quarter, the permittee shall assure compliance with the emissions standards of this permit through stack tests, alternative monitoring systems, or other methods as approved by the Department.	Decrease of 2,344 TPY NOx Net increase of 32 (PSD not triggered)  Tarmac proposed limits of 720 lb/hr, 24-hr avg and 2.1 lb/ton to avoid PSD

#### 2) CLINKER CONVEYOR LINE (EU027)

A new conveyor will allow cementitious material to be input to the clinker cooler system through an additional input line. The conveyor will not increase the current permitted amount of material to the kiln system. A primary and initial function of the conveyor will be to re-use older clinker material stored during past operations to substitute input of fresh clinker into the cooler system. Material will be added to a hopper, which will feed a conveyor belt. The conveyor belt will then feed into the existing clinker cooler system. A diagram of this process can be seen in Attachment 2. This conveying unit is determined to be subject to a unit specific requirement specified in 40 CFR 63 Subpart LLL. As such, it is being requested that this new conveyor line be added as an emission point to EU027, the Cement Plant Clinker Handling & Storage System. Pursuant to 40 CFR 63.1345, conveying equipment is subject to a 10% opacity limit, with daily Method 22 observations to ensure compliance.

The maximum capacity of this conveyor will be 30 tons per hour. Also, since this material is considered wet (>1.5% moisture per AP-42 11.19.2-5), the moisture content will satisfy the controlled sources category. As such, AP-42 yields the following emission factors from a controlled conveyor point<sup>1</sup>.

PM	PM10	PM2.5
[lb/ton]	[lb/ton]	[lb/ton]
0.00014	0.000046	0.000013

Utilizing these emission factors and assuming that the conveyor line will have a total of two separate transfer points, the fugitive particulate emissions will be as follows:

$$PM = 0.00014 \frac{lb}{ton} \times 30 \frac{ton}{hr} \times 8760 \frac{hr}{yr} \times \frac{ton}{2000 \ lb} \times 2 = 0.037 \frac{ton}{yr}$$

$$PM10 = 0.000046 \frac{lb}{ton} \times 30 \frac{ton}{hr} \times 8760 \frac{hr}{yr} \times \frac{ton}{2000 \ lb} \times 2 = 0.012 \frac{ton}{yr}$$

$$PM2.5 = 0.000013 \frac{lb}{ton} \times 30 \frac{ton}{hr} \times 8760 \frac{hr}{yr} \times \frac{ton}{2000 \ lb} \times 2 = 0.003 \frac{ton}{yr}$$

<sup>&</sup>lt;sup>1</sup> AP-42, Table 11.19.2-2.

#### 3) REPLACEMENT OF FINISH MILL No. 4 DUST COLLECTOR (EU013)

The baghouse associated with emission point EU-013 Baghouse I.D. F-432 will be replaced with two existing, but unused, Mikropul dust collectors (I.D. F-603 and I.D. F-604). These two dust collectors were originally permitted for the current kiln system in 0250020-008-AC. Details regarding these two existing dust collectors are outlined in the table below. Minor ductwork changes will be required to install the two dust collectors in the place of F-432. These two dust collectors are in better shape than the current F-432 unit. As such, Tarmac will put these existing two collectors to good use.

Finish Mill	Baghouse I.D.	Manufacturer	Model No.	Flow Rate (ACFM)	Cloth Area (ft²)	Air to Cloth Ratio
No. 4	F-603	Mikropul	121S-10-20	8,000	1,424	5.6
No. 4	F-604	Mikropul	121S-10-20	8,000	1,424	5.6

As shown, each dust collector has a flow rate capacity of 8,000 acfm. The total flow of F-432 was 17,000 acfm, in comparison to the 16,000 acfm of F-603 and F-604. For the purposes of this project and installation, the only pollutant of concern should be PM/PM10/PM2.5. Because this replacement will meet or exceed the currently stated baghouse efficiency (0.01 gr/acfm as noted in Section C.1 of permit 0250020-033-AV) and the flow rate of the two baghouses combined is less than the previous single baghouse (I.D. F-432 - 17,000 acfm), it is expected that the particulate emissions will in fact decrease by a potential of 6.38 TPY - 6.01 = 0.37 TPY (assumes 8760 hr/yr).

$$16,000 \operatorname{acfm} * \frac{0.01 \operatorname{gr}}{\operatorname{dscf}} * \frac{60 \operatorname{min}}{\operatorname{hr}} * \frac{1 \operatorname{lb}}{7000 \operatorname{gr}} = 1.37 \frac{\operatorname{lb PM}}{\operatorname{hr}}$$

$$\frac{1.37 \text{ lb}}{\text{hr}} * \frac{8760 \text{ hr}}{\text{yr}} * \frac{1 \text{ ton}}{2000 \text{ lb}} = 6.01 \frac{\text{ton PM}}{\text{yr}}$$

A flow diagram incorporating these two baghouses is shown in Attachment 3.

#### 4) INSIGNIFICANT ACTIVITIES (EU031)

Emissions Unit 031 currently is stated to address Unregulated Emissions Units and/or Activities. Presumably this term, Unregulated Emissions Units and/or Activities, derives from FDEP rules of Insignificant Emissions Units or Pollutant-Emitting Activities under 62-213.430(6), F.A.C.:

- (6) Insignificant Emissions Units or Pollutant-Emitting Activities.
- (a) All requests for determination of insignificant emissions units or activities made pursuant to paragraph 62-213.420(3)(n), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to this chapter. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of paragraph 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under this chapter shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to this rule.
- (b) An emissions unit or activity shall be considered insignificant if all of the following criteria are met:
- 1. Such unit or activity would be subject to no unit-specific applicable requirement.
- 2. Such unit or activity, in combination with other units and activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in subparagraph 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s).
- 3. Such unit or activity would neither emit nor have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

During the next TV permit renewal, Tarmac will, as required by rule, re-evaluate all Unregulated Emissions Units and/or Activities. Furthermore, Tarmac agrees with RER (previously PERA during the RAI letter correspondence) in its January 17, 2012 RAI letter that an Appendix I, List of Insignificant Emissions Units/activities should be included in the TV permit. This appendix should include all of the activities now listed in EU031 that are not emission units per exemptions under Rule 62-210.300(3)(a) or 62-210.300(3)(b)(1), F.A.C.. Unregulated emission units should be included in an Appendix U. For consolidation of all party's efforts and as stated

in the rule, Tarmac believes that the re-evaluation of all such units and activities should be withheld until TV permit renewal and not at this time.

At this time, Tarmac requests per 62-213.430(6), F.A.C., the Department to recognize the following unit and activities as applicable to this exemption and either be written into the Title V permit through this permitting action or be included in the next TV permit renewal. 62-213.430(6) allows for Tarmac to wait until the TV permit renewal.

"Emissions units or activities which are added to a Title V source after issuance of a permit under this chapter shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to this rule. "

Tarmac is requesting that the activities/.units be recognized at this time by the Department. The activities include emissions from the on-site analytical laboratory dust collector vent and painting activities including equipment such as onsite railcars and other ancillary equipment.

#### Laboratory Dust Collector

Tarmac has an on-site analytical laboratory for the purpose of evaluating and analyzing the various materials within the operations. As part of this operation, the laboratory will occasionally vent through a roof-mounted dust collector certain amounts of air pollutants, primarily particulate matter. The collector unit is a DUSTEX, model CJU-255 dust collector body having high efficiency pleated cartridge filters. The appended information of the pulse jet dust collector which typically operates in the range of 4" to 6" of static pressure will result in a flow range of 1500 to 2000 acfm, These filter system have an efficiency of at least 0.01 gr/acf. Conservatively assuming the collector operates at 1300 acfm and 8760 hr/yr, the potential PM emissions is 975 lb/yr. 975 lb/yr is less than the insignificant emissions unit threshold. This unit would not be subject to unit-specific applicable standard. A detailed description of the dust collector can be found in Attachment 4.

#### **Painting Activities**

As previously specified in the withdrawn application submitted January 17, 2012, the amount of painting is estimated to be less than 2500 gallons per year. The amount of paint used will be limited to assure the activity emissions remain below the thresholds in 62-213.430(6)(b)3., F.A.C. Similar to the allowance to other FDEP-permitted operations that have insignificant activities status for painting activities, Tarmac will track the paint and MSDS of VOC and HAP emissions to ensure the pollutant air emissions are less than 5.0 tpy of VOC, 2,500 lb of total HAP and 1,000 lb of individual HAP. Tarmac will use logged material balance sheets to assure the painting operation emissions are less than these insignificant activities threshold as stated in 62-213.430(6), F.A.C. Paints typically have a content of less than 4 lb/gal of VOC such that VOC emissions are expected to be less than 5 ton/year based on usage of 2500 gallons per year of paint. Particulate matter emissions from painting are expected to be negligible. This activity is subject to no other unit-specific applicable requirement per FDEP rules. This facility is already a major source per 62-213.420(3)(c)1., F.A.C.

Tarmac recognizes that RER mentioned in its response to the January 17, 2012 response that other permitting may be required for painting. Tarmac will separately address other permitting requirements. We appreciate the reminder from RER

#### 5) Use of Tires in Pyroprocessing System (EU028)

Air construction permit 0250020-029-AC, and now 034-AV, permitted whole tires to be used in the pyroprocessing system. However, the permit limited the feed rate to 1.65 tons per hour, based on a 24-hour block average. Through AC permit 0250020-031-AC, the allowance of a variety of tire derived fuel was established, allowing Tarmac to use shredded used tires with steel belt material, shredded used tires without steel belt material and tire fluff. Based on the review of extensive information on tire usage in modern cement kiln, these materials were not given a limitation to their feed rate.

The argument for use of whole tires has been made by FDEP as a means to generally reduce air pollutant emissions. Tires are readily available and have many benefits when used as a fuel. The use of tires and TDF reduces the strain on the demand for fossil fuels, are less expensive than fossil fuels, diverts their volumetric load on landfills, which allows for the landfill capacity to be saved for municipal solid wastes, and lowers the overall risk that scrap tire piles pose. In fact, the origin of 62-711 solid waste permitting of whole tires is to limit stock piling of tires. Also, when used in a cement kiln, its ash becomes a material component of the final products. Otherwise, if burned, the ash would be landfilled and prove no beneficial use.

Additionally, tires have many fuel characteristics that outperform traditional fuels, such as coal. Particularly, tires have a higher heating value and lower moisture content than coal. In addition, data suggests that pollutant emissions typically decrease when combustion units, such as a cement kiln, utilize tires and TDF in their fuel.

The following chart from FDEP permitting (0530010-022-AC) indicates expected air emissions reductions from tires.

Pollutant	Expected Effect of TDF/Scrap Tire
СО	None
SO2	None
NOx	Decrease
PM	None
Total Hydrocarbons	None

Zinc	Increase	
Other Metals	None or Decrease	
Dioxins/Furans	None	
Benzene	Decrease	
Formaldehyde	Decrease	
Semi-volatiles	Decrease	

The above results are consistent with a USEPA report citing that "with the exception of zinc emissions, potential emissions from TDF are not expected to be very much different from other conventional fossil fuels, as long as combustion occurs in a well-designed, well-operated, and well-maintained combustion device".[Emphasis added.] The data above is also consistent with claims of NO<sub>X</sub> reductions as a result of firing TDF. [0530010-022-AC]

The high temperatures, long residence times, and inherent scrubbing that take place within a cement kiln provide an environment conducive to the efficient combustion of tires and would more than suffice the requirements of a well-designed, well-operated, and well-maintained combustion device. In another document, the EPA states "Based on over 15 years of experience with more than 80 individual facilities, EPA recognizes that the use of tire-derived fuels is a viable alternative to the use of fossil fuels.<sup>2</sup>"

A cement kiln functions to produce a salable product. Without significant planning and operational control, the use of tires and TDF can greatly affect the thermochemistry of the kiln and the kiln can become out of thermal and chemical balance causing significant damage to the kiln and de-value the physical product. Thus, Tarmac like other cement companies in Florida has a vested interest to ensure the use of tires in the kiln is carefully controlled.

For these reasons, firing whole tires and TDF in cement kilns has become common practice in Florida and recommended by FDEP. The following chart from the application for 0250020-031-AC indicates the expected potential emissions reductions by the use of tires.

-

<sup>&</sup>lt;sup>2</sup> United States Environmental Protection Agency. "Tire-Derived Fuel (TDF)."

Material Comparison:								
1410	icerial companson.	Coal (wet)	Material (wet)	]				
typi	ical Moisture Content	5.00%	0.5%	percent	1			
-,,-	typical Heat Content	13,000	13,800	btu/lb				
	typical Heat Content	26.0	27.6	mmbtu/ton				
Emi	issions Comparison:				-			
	•	Coal Emission	Test Material	Projected heat	Projected Actual	Baseline Actual	Difference in	
		factor	Emiss Factor	input <sup>c</sup>	Emissions	Emissions	Emissions	
		(lb/mmbtu)	(lb/mmbtu)	mmbtu/yr	(tons/yr)	(tons/yr)	(tons)	
202	Test Material <sup>a</sup>		0.0030	3470766	5.1		-5.8	
Ñ	Coal Equivalent <sup>b</sup>	0.0034				10.9		
ğ	Test Material <sup>a</sup>		0.7162	3470766	1242.9		-476.8	
z	Coal Equivalent <sup>b</sup>	0.7320				1719.7		
ූ	Test Material <sup>a</sup>		0.4432	3470766	769.1		-983.0	
ا ت	Coal Equivalent <sup>b</sup>	0.4072				1752.1		
υ l	Test Material <sup>a</sup>		0.0278	3470766	48.2		-32.8	
8	Coal Equivalent <sup>b</sup>	0.0348				81.0		
_	Test Material		0.0228	3470766	39.6		-8.3	
፮	Coal Equivalent <sup>b</sup>	0.0220				47.9		
- Con Equivalent   0.0220   47.5								

Based on the status of tire and TDF approval in 0250020-031-AC, Tarmac requests that whole tires be added to 0250020-031-AC and that these limitations be lifted to allow the unlimited use of whole or chipped tires and tire derived fuel. Further, we are requesting the Department clarify the conflicting conditions between permit 0250020-029-AC and 0250020-031-AC of stack testing requirements for tires such that the Department state that 029-AC conditions including stack testing is not applicable.

#### 6) LIMESTONE RESIDUALS REQUIREMENT (EU028)

Tarmac America, LLC received AC permit No. 0250020-025-AC which allowed use of calcium carbonate (i.e., limestone) residuals from the Miami-Dade County Water Treatment Plants as a raw material supplement in the clinker production process. Limestone residuals are typically disposed currently by land application or landfilled. In land application the limestone is a beneficial use for fertilizer to soil for farming.

Tarmac requests that the language in Section B.3.b. from the current Title V Operation Permit be changed to allow limestone from any supplier to be incorporated and be changed to the following:

Calcium Carbonate Source: The permittee is hereby authorized to use CaCO<sub>3</sub> (i.e., limestone residuals) from the lagoons of the Miami-Dade County Water Treatment Plants as a raw material supplement in the clinker production process. Use of CaCO<sub>3</sub> residuals from any other source shall require prior written approval from the RER. The material shall be subject to analytical testing requirements for chloride and mercury content as determined by the RER. Results of such testing shall be maintained on file.

This change will allow Tarmac to re-use such materials to make a salable product, clinker, from a number of suppliers of limestone residuals. Tarmac believes this re-use material can be re-used to offset a significant portion of Tarmac's current usage of virgin limestone. Currently, the limit to a single supplier (i.e., Miami-Dade County Water Treatment Plants (MDCWTP)) impedes and conflicts with free commerce (i.e., the Dormant Commerce Clause) and directly limits availability and affects pricing. In fact, this argument was played out in that MDCWTP immediately inflated pricing on limestone residuals to Tarmac upon knowing the AC permit issued by DERM restricted the use to only them. Following issuance of this permit, Tarmac has not used this material because of pricing and availability from MDCWTP.

Tarmac successfully conducted short term trials and provided material analysis to DERM to justify the long-term usage of these materials. Following these tests and analysis, concerns of DERM of the purity of limestone and its impact on air emissions has been thoroughly reviewed under the review of permitting of alternative fuels (0250020-031-AC). In addition to the

analysis of the MDCWTP material, EPA has reviewed the water treatment plant disposal options of these residuals and recommends its re-use in the production of cement.<sup>3</sup> The American Water Works Association similarly supports research to use WTR for cement and brick production.<sup>4</sup> Mercury will be monitored for material balance per current Title V permit requirements. Like alternative fuels, other metals are captured in the pyroprocessing system. The chloride content must be similar to other raw materials. As with alternative fuel materials chloride is already monitored for cement quality and kiln system impacts (e.g., kiln plugging). Continuous monitor systems of NOx, SO2, THC and CO will ensure non-HAP emissions remain in compliance. Furthermore, these residuals compositions should not vary greatly from plant to plant in the south Florida area given the similar source of water (ground water from similar aquifer) and purification methods.

Because of this material has been shown to have no adverse impact on emissions, Tarmac request that the 10% limitation on the usage of limestone residual limit in specific condition B.3.a. be removed as the limitation is not needed to ensure compliance with air rules.

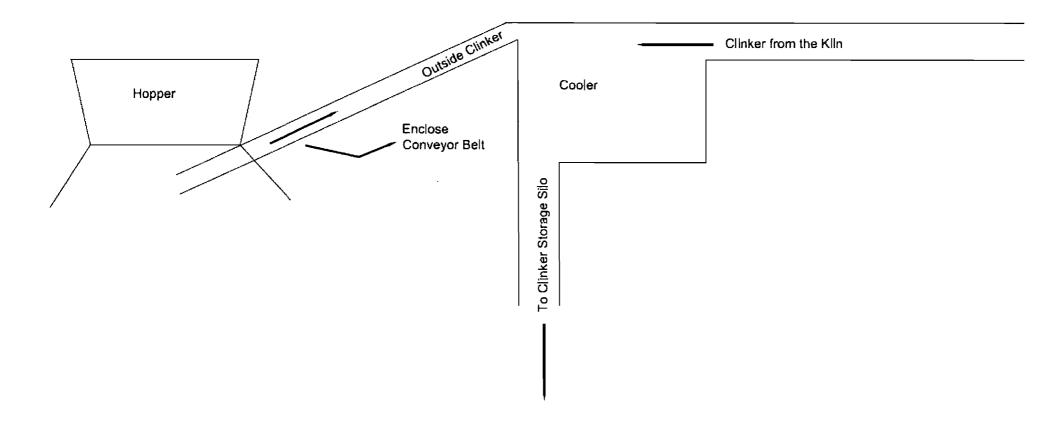
This material and related materials are addressed in the following section regarding TV permit sp. Cond. B.10..

<sup>3</sup> EPA.625/R-95/008, Technology Transfer Handbook, Management of Water Treatment Plant Residuals.

<sup>&</sup>lt;sup>4</sup> http://www.waterrf.org/resources/StateOfTheScienceReports/ResearchonResidualsfromWaterTreatment.pdf

#### **Attachment 2**

Tarmac America, LLC Facility ID: 0250020 Clinker Feeding System Diagram



Titan America LLC
Pennsuco Complex
Medley, Florida

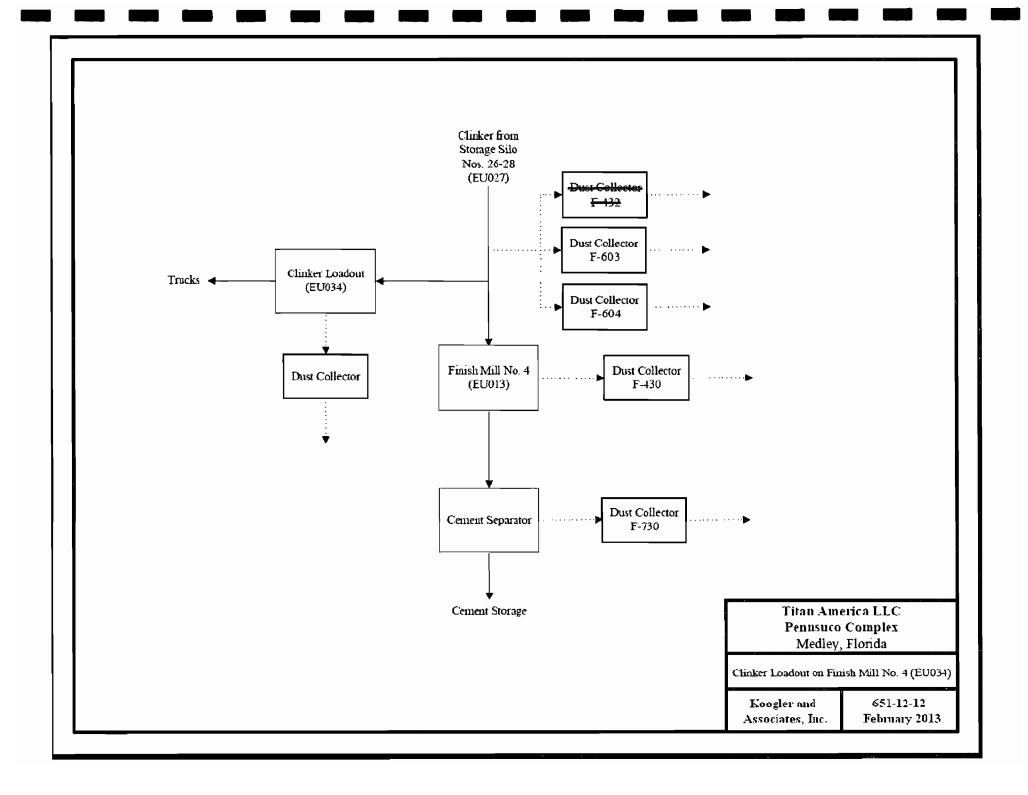
Clinker Feeding System

Koogler and
Associates, Inc.

March 2013

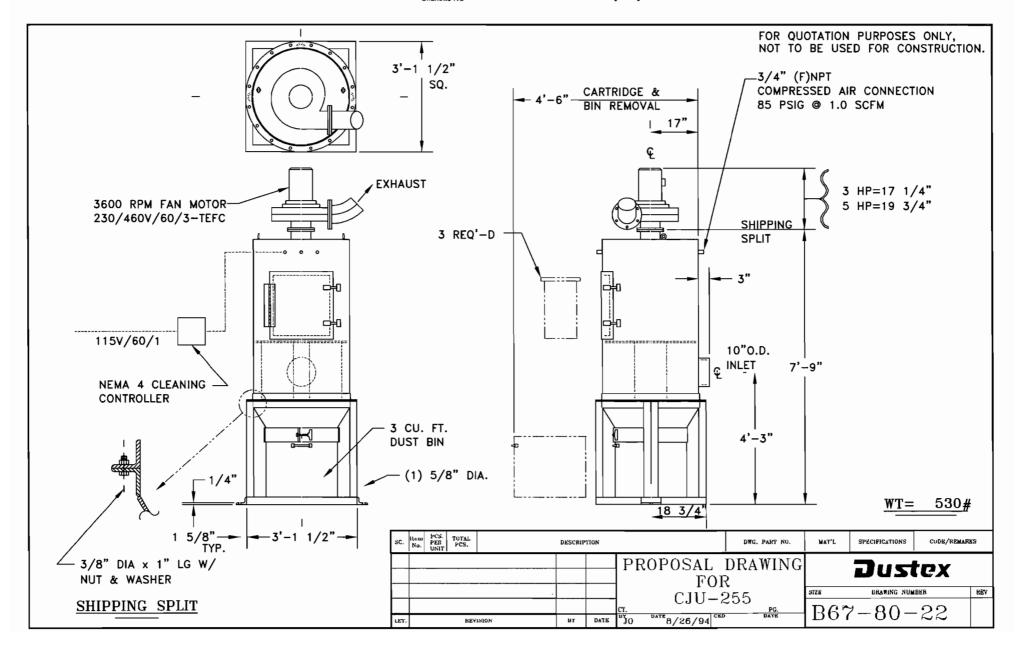
#### **Attachment 3**

Tarmac America, LLC Facility ID: 0250020 Finish Mill No. 4 Flow Diagram



#### **Attachment 4**

Tarmac America, LLC Facility ID: 0250020 Laboratory Dust Collector Specifications



#### STANDARD EQUIPMENT FEATURES

#### **Patented Cleaning Technology**

The Dustex reverse jet cleaning system has been designed using accurate and effective air jet design procedures. The maximum flow capacity of a pleated cartridge filter element is determined by the reverse air volume of the cleaning jet. Simply increasing the area of the filter media without increasing the volume of the reverse cleaning airflow does not increase the rated flow capacity of the filter.

Dustex developed a proprietary design which incorporates improved cartridge engineering plus some innovative arrangements for filter access and filter changeout. Ultimately, the velocity of the jet is selected to maintain a high efficiency porous filter dust cake that runs at low pressure drop and lower compressed air consumption.

## U.S. Patent Short 2 of 2

#### **Innovative Design Considerations**

All of the cartridges in Dustex CJ collectors can be installed and maintained from the "clean side" of the collector. If a cartridge becomes plugged due to a failure of either the pneumatic or electrical system it can easily be restored to optimum operating condition by manually cleaning it with a compressed air wand. This very simple procedure does not require removal of the cartridge and it can significantly prolong the useful operating life of the cartridge.

Individual large capacity vertically mounted cartridges never forfeit up to 30% of filter media as a result of particulate stacking that frequently occurs on most horizontally mounted cartridges during the cleaning cycle. In addition, the vertically mounted cartridges do effectively eliminate the sealing problems incurred by cartridges that are horizontally mounted in tandem.

All of the cleaning system components are located in the clean air plenum. This provides for weather protection and very quiet operation of the compressed air diaphragms. Also, with no housing protrusions, CJ collectors can be located into tight corners and against walls thereby saving valuable floor space. If explosion vents are required, they can be located at the back or on the ends of the dust collector.



#### Long Life Cartridge Design

Dustex utilizes wide pleat spacing to allow more room on the filter surface to ensure the formation of a deep / porous dust cake without the danger of bridging. This results in more of the filter media actively filtering the dust.

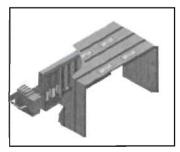
Special cartridge construction provides a rigid cartridge filter frame to support the reverse jet forces exerted on the closed end-cap of the filter element. The flat bottomed closed end-caps allow the development of uniform cleaning action from the top to the bottom of the filter media.

Specially retained resilient seals apply the correct sealing pressure on the mounting surface for a gas and dust tight seal on the tubesheet.

#### **Dustex vs The Conventional**

The combination of the patented CJ collector cleaning system and the unique engineering used in the construction of our cartridges offers a superior alternative to contemporary designs found elsewhere in the market. It also allows for a very unique "Boothwall" configuration unit as depicted on the right.

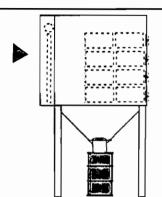
Single module CJ collectors are capable of handling anywhere from 750 CFM to 92,000 CFM. The specifications for your particular applications should be discussed with your local representative or our factory sales engineers directly.

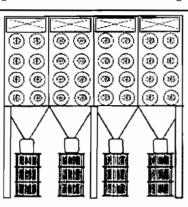


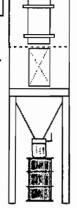
#### **VERTICAL BENEFITS**

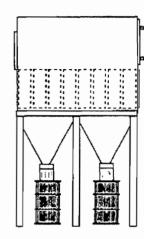
#### Why Consider Vertical Cartridges?

Let's compare two cartridge collectors sized to accomodate about 35,000 CFM, one with horizontal cartridges and one with vertical cartridges.







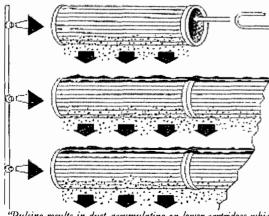


#### TYPICAL HORIZONTAL CONFIGURATION

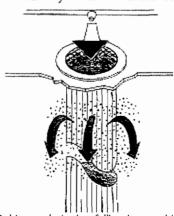
#### TYPICAL VERTICAL CO

- Pulse jet cleaning components are on the back of the unit thus prohibiting the nesting of the unit into a corner or up against a wall.
- Typically 4 pyramidal hoppers or a trough hopper is utilized. Note "multiple inlets".
- Qty 64 cartridges which are accessible on the dirty side of the unit through 32 individual access ports, each of which has a hand knob. The unit may require a single or two tiered service platform.
- Once you have removed all of the hand knobs, the filters must be pulled off of a retaining yoke. To remove the second cartridge, you may have to reach in with some type of "hook" and pull it off of the yoke. This usually results in damage to the cartridge and more housekeeping.

- All pulse jet cleaning components are located inside of the collector's clean air plenum so nesting the unit into a corner is never a problem.
  - Typically 2 pyramidal hoppers or a trough hopper is utilized. Note "single inlet!"
- Qty 32 cartridges which are accessed through doors in the clean air plenum. An available ladder provides access to the entry doors. An outside service platform is not necessary.
- Once you have entered the clean air plenum, each individual cartridge is readily available and can be removed by simply releasing a hold down clamp located over the filter. Each of the cartridges sits directly on the tubesheet and they are never tandemed.



"Pulsing results in dust accumulating on lower cartridges which reduces media area. Removal of cartridges results in dust falling outside of the collector onto the floor."



"Pulsing results in dust falling downward into the hopper. Removal of cartridges also results in dust falling into the hopper which improves housekeeping."

# VERTICAL

#### **Typical Model Sizes**

MODEL	NOMINAL CFM	WIDTH	LENGTH	HEIGHT	WEIGHT (LBS)
CJ 150	750	28" Diameter	N/A	8' - 9"	500
CJ 255	1300	34" Diameter	N/A	9' - 0"	530
CJ 340	1750	2' - 8"	2' - 6"	10' - 4"	700
CJ 510	2600	2' - 8"	3' - 8"	10' - 4"	830
CJ 680	3500	2' - 8"	4' - 11"	10' - 4"	1,055
CJ 850	4350	2' - 8"	6' - 2"	10' - 4"	1,425
CJ 1020	5250	2' - 8"	7' - 5"	10' - 4"	1,650
CJ 1000	4000	4' - 9"	3' - 4"	14' - 4"	1,500
CJ 1500	5800	4' - 9"	4' - 9"	14' - 11"	1,750
CJ 2000	7800	4' - 9"	6' - 3"	14' - 4"	2,200
CJ 2500	9800	4' - 9"	7' - 6"	14' - 6"	2,450
CJ 3000	11700	4' - 9"	9' - 2"	14' - 11"	2,800
CJ 4000	15600	6' - 6"	8' - 5"	18' - 10.5"	5,725
CJ 5000	19500	8' - 0"	8' - 5"	19' - 6.5"	6,000
CJ 6000	23400	6' - 6"	13' - 4"	17' - 4.5"	8,025
CJ 7500	29300	8' - 0"	13' - 4"	18' - 7.5"	8,500
CJ 8000	31200	6' - 6"	16' - 4"	17' - 4.5"	9,575
CJ 10000	39000	8' - 0"	16' - 4"	19' - 3.5"	10,150
CJ 12500	48800	8' - 0"	21' - 3"	18' - 7.5"	14,300
CJ 15000	58500	8' - 0"	24' - 3"	19' - 3.5"	15,600
CJ 18000	70200	9' - 6"	24' - 9"	20' - 7.5"	18,400
				1.7	

#### **Optional Equipment**

Integral Fan Packages HEPA Afterfilters Access Ladders Service Platforms

Explosion Vents
Sprinkler Systems
Acoustic Diffusers
Variety of Media Options

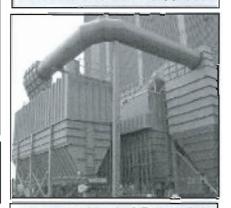
Trough Hoppers
Rotary Airlocks
3 Cu.Ft. Dust Bins
55 Gallon Drum Kits

Automated Controls Instrumentation Hopperless Bin Vents High Pressure Receivers

#### **Other Dustex Products**



Walk-In Plenum Pulse Jet



Remote Venturi Pulse Jet

#### 

Detailed general arrangement drawings for any specific size are available from your local representative or by calling the factory.

CJ-1000 to CJ-18000

CJ-340 to CJ-1020

Dustex Corporation P.O. Box 7368 Charlotte, NC 28241 Tel:704-588-2030 Fax: 704-588-2032

Bulletin 4700C-Rev-1/02



### Department of Environmental Protection RECEIVED

#### Division of Air Resource Management

APR 2 2 2013

#### **APPLICATION FOR AIR PERMIT - LONG FORM**

DIVISION OF AIR RESOURCE MANAGEMENT

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

**Air Operation Permit** – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

1. Facility Owner/Company Name: Tarmac America LLC

To ensure accuracy, please see form instructions.

#### **Identification of Facility**

2.	Site Name: Pennsuco Complex							
3.	Facility Identification Number: 025002	20						
4.	Facility Location							
	Street Address or Other Locator: 11000	) NW 1	21 Way					
	City: <b>Medley</b> Coun	ty: <b>Mi</b> a	ımi-Dade	Zip Code: 33178				
5.	Relocatable Facility?	6	. Existing T	itle V Permitted Facility?				
	Yes X No		x Yes	☐ No				
Ap	plication Contact	•						
1.	Application Contact Name: Max Lee		_					
2.	Application Contact Mailing Address			<del>-</del>				
	Organization/Firm: Koogler and Asso		Inc					
	Street Address: 4014 NW 13 <sup>th</sup> Str	eet						
	City: Gainesville	State	: Florida	Zip Code: 32609				
3.	Application Contact Telephone Number	ers	_					
	Telephone: (352) 377 - 5822 ext. 13 Fax: (352) 377 - 7158							
4.	4. Application Contact E-mail Address: mlee@kooglerassociates.com							
<u>Ap</u>	Application Processing Information (DEP Use)							
l.	Date of Receipt of Application: 4	113	3. PSD Nun	nber (if applicable):				
2.	Project Number(s): 02 CO02 0 -02 c	- 1	4. Siting Nu	mber (if applicable):				

DEP Form No. 62-210.900(1) - Form Effective: 03/11/2010

654-12-12

#### **Purpose of Application**

This application for air permit is being submitted to obtain: (Check one)						
Air Construction Permit						
Air construction permit.						
Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).						
Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.						
Air Operation Permit						
☐ Initial Title V air operation permit.						
Title V air operation permit revision.						
Title V air operation permit renewal.						
Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.						
Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.						
Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)						
Air construction permit and Title V permit revision, incorporating the proposed project.						
Air construction permit and Title V permit renewal, incorporating the proposed project.						
Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:						
☐ I hereby request that the department waive the processing time						
requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.						
Application Comment						
Application is for a number of construction activities. A detailed list of these activities can be seen in Attachment 1.						
As well, the regulatory analysis and the project descriptions are detailed in Attachment 1.						
•						

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

#### **Scope of Application**

		Г.,	T
Emissions		Air	Air Permit
Unit ID	Description of Emissions Unit	Permit	Processing
Number		Type	Fee
		Type	100
EU013	Finish Mill System: Finish Mill No. 4	NA	NA
EU027	Clinker Handling and Storage System	NA	NA
EU028	Cement Plant Pyroprocessing and Raw Mill System	NA	NA
EU031	Unregulated Emissions Units and/or Activities: Fugitive Emissions	NA	NA
			-
_			
	_		

Application Processing Fee	
Check one: Attached - Amount: \$	Not Applicable

#### Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name: Kevin Baird

l.	Owner/Authorized Representative Name: Kevin Baird				
2.	Owner/Authorized Representative Mailing Address				
	Organization/Firm: Tarmac America LLC				
	Street Address: 11000 NW 121 Way				
	City: Medley State: Florida Zip Code: 33178				
3.	Owner/Authorized Representative Telephone Numbers				
	Telephone: (305) 364-2206 ext. Fax: (305) 827 - 7421				
4.	Owner/Authorized Representative E-mail Address: kbaird@titanamerica.com				
5.	Owner/Authorized Representative Statement:				
	I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.				
	Signature Date				

#### Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

Prince y responsible official			
1. Application Responsible Official Name: not applicable			
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):			
For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.			
For a partnership or sole proprietorship, a general partner or the proprietor, respectively.			
For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.			
The designated representative at an Acid Rain source or CAIR source.			
3. Application Responsible Official Mailing Address Organization/Firm: Tarmac America LLC			
Street Address: 11000 NW 121 Way			
City: Medley State: Florida Zip Code: 33178			
4. Application Responsible Official Telephone Numbers Telephone: 305-364-2206 ext. Fax: 305-827-7421			
5. Application Responsible Official E-mail Address:			
6. Application Responsible Official Certification:			
I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.			
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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to			
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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to			

DEP Form No. 62-210.900(1) – Form

Effective: 03/11/2010

#### **Professional Engineer Certification**

1	Professional Engineer Name: Max Lee, Ph.D., P.E.			
1.	Registration Number: 58091			
2.				
۷.	Organization/Firm: Koogler and Associates, Inc			
	Street Address: 4014 NW 13 <sup>th</sup> Street			
2	City: Gainesville State: Florida Zip Code: 32609  Professional Engineer Telephone Numbers			
Э.	•			
	Telephone: (352) 377 - 5822 ext. 13 Fax: (352) 377 - 7158			
<u>4.</u> 5.	Professional Engineer E-mail Address: mlee@kooglerassociates.com  Professional Engineer Statement:			
Э.				
	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.			
	(3) If the purpose of this application is to obtain a Title V 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 plan and schedule is submitted with this application.			
	(4) If the purpose of this application is to obtain an air construction permit (check here $\mathbf{x}$ , if so)			
	or concurrently process and obtain an air construction permit and a Title $V$ air operation permit revision or renewal for one or more proposed new or modified emissions units (check here $\square$ , 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.			
	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal 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 the such permit.			
	3/27/13			
آسه شاؤ	Signature Date			
1	s(seal)(s			
25. 57				

Attach any exception to certification statement.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

#### II. FACILITY INFORMATION

#### A. GENERAL FACILITY INFORMATION

#### **Facility Location and Type**

1.	1. Facility UTM Coordinates  Zone East (km) 562.27  North (km) 2861.7			2. Facility Latitude/Longitude Latitude (DD/MM/SS) 25°52'26" N Longitude (DD/MM/SS) 80°22'20" W			
3.	Governmental Facility Code: 0	4. Facility Status Code: A	5.	Facility Major Group SIC Code: 32	6. Facility SIC(s): 3241		
7.	Facility Comment:						

#### **Facility Contact**

=						
1.	Facility Contact Name: Kevin Bai	rd				
2.	Facility Contact Mailing Address					
	Organization/Firm: Tarmac America LLC					
	Street Address: 11000 NW 121 Way					
	City: Medley		State:	Florida	Zip Code:	33178
3.	Facility Contact Telephone Number	ers:				
	-		Fax:	(305)	827 - 7421	
4.	Facility Contact E-mail Address: 1	kbaire	d@tita	namerica.c	om	

#### Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

Facility Primary Responsible Office	cial Name: not applicable				
Pacility Primary Responsible Official Mailing Address Organization/Firm:					
Street Address:					
City:	State:	Zip Code:			
Facility Primary Responsible Offic	cial Telephone Numbers	<del></del>			
Telephone: ( ) - ext.	Fax: ( ) -				
Facility Primary Responsible Office	cial E-mail Address:				
	Facility Primary Responsible Office Organization/Firm: Street Address: City: Facility Primary Responsible Office Telephone: ( ) - ext.	Organization/Firm: Street Address:			

#### **Facility Regulatory Classifications**

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1.  Small Business Stationary Source Unknown
2. Synthetic Non-Title V Source
3. X Title V Source
4. X Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)
5. Synthetic Minor Source of Air Pollutants, Other than HAPs
6. X Major Source of Hazardous Air Pollutants (HAPs)
7. Synthetic Minor Source of HAPs
8. X One or More Emissions Units Subject to NSPS (40 CFR Part 60)
9.  One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)
10. X One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)
11. Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))
12. Facility Regulatory Classifications Comment:
The Cement Plant is subject to;
40 CFR 60 Subpart F: Standards of Performance for Portland Cement Plants
(superceded by 40 CFR 63, Subpart LLL);
40 CFR 60, Subpart Y: Standards of Performance for Coal Preparation
Plants; and
40 CFR 63 Subpart LLL: National Emission Standards for Hazardous Air Pollutants
from the Portland Cement Industry.
•

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

## List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NOX	A	_
SO2	A	_
СО	A	
PM	A	
VOC	A	
PM10	A	
PM2.5	A	
HAPS	A	
D/F	C	
H114	C	
PB	В	
H106	С	

### **B. EMISSIONS CAPS**

## Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions	2. Facility- Wide Cap [Y or N]?	3. Emissions Unit ID's Under Cap	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
Cap	(all units)	(if not all units)			
	_				
					_
7. Facility-Wi		Emissions Cap Con			

### C. FACILITY ADDITIONAL INFORMATION

## Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot 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:  Previously Submitted, Date:
2.	Process Flow Diagram(s): (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.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (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:
Ac	dditional Requirements for Air Construction Permit Applications
1.	Area Map Showing Facility Location:  Attached, Document ID:  Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):  X Attached, Document ID: Attachment 1
3.	Rule Applicability Analysis:  X Attached, Document ID: Attachment 1
4.	List of Exempt Emissions Units:  Attached, Document ID: X Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification:  Attached, Document ID: Attachment 1 Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.):  Attached, Document ID: X Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.):  Attached, Document ID: X Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):  Attached, Document ID:   Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):  Attached, Document ID: X Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):  Attached, Document ID:  Not Applicable

## C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

## Additional Requirements for FESOP Applications - NA

1.	List of Exempt Emissions Units:						
	Attached, Document ID: Not Applicable (no exempt units at facility)						
<u>A</u> (	Additional Requirements for Title V Air Operation Permit Applications - NA						
1.	List of Insignificant Activities: (Required for initial/renewal applications only)  Attached, Document ID: Not Applicable (revision application)						
2.	Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)  Attached, Document ID:  Not Applicable (revision application with no change in applicable requirements)						
_							
3.	Compliance Report and Plan: (Required for all initial/revision/renewal applications)  Attached, Document ID:						
	Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.						
4.	List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)  Attached, Document ID:						
	Equipment/Activities Onsite but Not Required to be Individually Listed						
	☐ Not Applicable						
5.	Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)						
	Attached, Document ID: Not Applicable						
6.	Requested Changes to Current Title V Air Operation Permit:  Attached, Document ID: Not Applicable						

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

## Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:
Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):  Attached, Document ID: Previously Submitted, Date:  Not Applicable (not an Acid Rain source)
Phase II NO <sub>X</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):  Attached, Document ID: Previously Submitted, Date:  Not Applicable
New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):  Attached, Document ID: Previously Submitted, Date:  Not Applicable
2. CAIR Part (DEP Form No. 62-210.900(1)(b)):  Attached, Document ID:  Not Applicable (not a CAIR source)  Previously Submitted, Date:  Not Applicable (not a CAIR source)
Additional Requirements Comment

#### 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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes 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.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

### A. GENERAL EMISSIONS UNIT INFORMATION

## Title V Air Operation Permit Emissions Unit Classification

1.	or renewal Title V	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.						
En	nissions Unit Desc	ription and Status					
1.	Type of Emissions	Unit Addressed in this	Sec	tion: (Check one)			
	single process	s Unit Information Sect or production unit, or a which has at least one or	ctivi	ty, which produces	one or more air		
	of process or p		ivitie	es which has at least	e emissions unit, a group one definable emission		
				,	e emissions unit, one or fugitive emissions only.		
2.	Description of Em Cement Plant Fire	issions Unit Addressed aish Mill No. 4	in tl	nis Section:			
3.	Emissions Unit Id	entification Number: 0	13				
4.	Emissions Unit Status Code: A	5. Commence Construction Date:	6.	Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 32		
8.	Federal Program A	Applicability: (Check a	l tha	at apply)			
	Acid Rain Uni	t					
	CAIR Unit						
9.	Package Unit:  Manufacturer:  Model Number:						
10.	Generator Namepl	ate Rating: MW					
11.	Emissions Unit Co Replacing Bagho	omment: use I.D. F-432 with F-0	503	and F-604			

## EMISSIONS UNIT INFORMATION Section [1] of [4]

Finish Mill No. 4

### **Emissions Unit Control Equipment/Method:** Control $\underline{1}$ of $\underline{1}$

1. Control Equipment/Method Description: Fabric Filter Low Temperature

2. Control Device or Method Code: 018

# B. EMISSIONS UNIT CAPACITY INFORMATION (Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

_		
1.	Maximum Process or Throughput Rate: 140 TPH (24-hour block av	verage)
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:	
	hours/day	days/week
	weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule Comment:	
[		

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

#### **Emission Point Description and Type**

1.	Identification of Point on Flow Diagram: EU013	Plot Plan or	2. Emission Point 7	Type Code:
3.	Descriptions of Emission Baghouse I.D. F-603 Baghouse I.D. F-604 Baghouse I.D. F-430 Baghouse I.D. F-730	Points Comprising	g this Emissions Unit	for VE Tracking:
	ID Numbers or Descriptio	ns of Emission Ui	nits with this Emission	
5.	Discharge Type Code:	6. Stack Height feet	:	7. Exit Diameter: feet
8.	Exit Temperature: °F	9. Actual Volur Acfm	netric Flow Rate:	10. Water Vapor: %
11.	Maximum Dry Standard F dscfm	low Rate:	12. Nonstack Emissi feet	on Point Height:
13.	Emission Point UTM Coo Zone: East (km): North (km)		14. Emission Point L Latitude (DD/MI Longitude (DD/N	,
15.	Emission Point Comment:			

## D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1.	. Segment Description (Process/Fuel Type):  Mineral Products → Cement Manufacturing → Dry Process → Clinker Grinding					
2.	. Source Classification Code (SCC): 30500617		3. SCC Units: Tons Cement Processed			
4.	Maximum Hourly Rate: 140 TPH	5.	Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8.	Maximum 9	% Ash:	9.	Million Btu per SCC Unit:
10.	. Segment Comment:					

### E. EMISSIONS UNIT POLLUTANTS

## List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	018		
PM10	018		
_			
_			
	-		

## EMISSIONS UNIT INFORMATION Section [1] of [4]

## POLLUTANT DETAIL INFORMATION Page [1] of [2]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM	lutant Emitted: <b>PM</b> 2. Total Percent Efficiency of Control:			
3. Potential Emissions: lb/hour 136.15	•	netically Limited? Yes 🕱 No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: Reference:		7. Emissions Method Code:		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:		
tons/year	From:	Го:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:		
tons/year	5 years 10 years			
10. Calculation of Emissions:  Annual emissions potential based on reasona AV, Condition D.2.note  Emissions from new baghouse explained in A	attachment 1.	oed in 0250020-033-		
11. Potential, Fugitive, and Actual Emissions Comment:				

EMISSIONS UNIT INFORMATION Section [1] of [4]

POLLUTANT DETAIL INFORMATION
Page [1] of [2]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

EMISSIONS UNIT INFORMATION Section [1] of [4]

## POLLUTANT DETAIL INFORMATION Page [2] of [2]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1 Otential, Estimated 1 agrerie, and Dasenne o	v i i ojecica i ietaai ziiiis	310115	
1. Pollutant Emitted: PM10	2. Total Percent Efficie	ency of Control:	
3. Potential Emissions:  lb/hour 136.15		netically Limited? Yes x No	
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):		
6. Emission Factor:  Reference:		7. Emissions Method Code:	
Reference:			
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month		
tolls/year	From:	o:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:		
tons/year	☐ 5 years ☐ 1	0 years	
10. Calculation of Emissions: Annual emissions potential based on reasonal AV, Condition D.2.note  Emissions from new baghouse explained in A		ped in 0250020-033-	
11. Potential, Fugitive, and Actual Emissions Co	omment:		

EMISSIONS UNIT INFORMATION Section [1] of [4]

POLLUTANT DETAIL INFORMATION
Page [2] of [2]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

## EMISSIONS UNIT INFORMATION

Section [1] of [4]

Finish Mill No. 4

#### G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: VE05	2. Basis for Allowable Rule	Opacity:  Other
3.	Allowable Opacity: Normal Conditions: 05 % E	xceptional Conditions:	%
	Maximum Period of Excess Opacity Allow	1	min/hour
4.	Method of Compliance: <b>METHOD 22</b>		
5.	Visible Emissions Comment:		<del>-</del>
40	CFR 63.1350(e), Subpart LLL		

## EMISSIONS UNIT INFORMATION Section [1] of [4]

Finish Mill No. 4

#### H. CONTINUOUS MONITOR INFORMATION

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

No Continuous Monitoring information submitted.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

## EMISSIONS UNIT INFORMATION Section [1] of [4]

Finish Mill No. 4

#### I. EMISSIONS UNIT ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

$\Delta$	initional Requirements for An Applications, Except as Other wise 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)  X Attached, Document ID: Attachment 2 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: x 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: 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: x Previously Submitted, Date On File with DEP
6.	Compliance Demonstration Reports/Records:  Attached, Document ID:  Test Date(s)/Pollutant(s) Tested:  X 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

DEP Form No. 62-210.900(1) – Form 654-12-12

Effective: 03/11/2010

## **EMISSIONS UNIT INFORMATION**

Section [1] of [4]

Finish Mill No. 4

## I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

### Additional Requirements for Air Construction Permit Applications

	date on at the quite ments for the constituent	
1.	Control Technology Review and Analysis (F.A.C.; 40 CFR 63.43(d) and (e)):	Rules 62-212.400(10) and 62-212.500(7),
	Attached, Document ID:	▼ Not Applicable
2.	Good Engineering Practice Stack Height Ar	nalysis (Rules 62-212.400(4)(d) and 62-
	212.500(4)(f), F.A.C.):	
	Attached, Document ID:	
3.	Description of Stack Sampling Facilities: (1 only)	Required for proposed new stack sampling facilities
	Attached, Document ID:	Not Applicable
Ad	ditional Requirements for Title V Air Ope	eration Permit Applications
1.	Identification of Applicable Requiremen	nts:
	Attached, Document ID:	
2.	Compliance Assurance Monitoring:	
	Attached, Document ID:	X Not Applicable
3.	Alternative Methods of Operation:	
	Attached, Document ID:	X Not Applicable
4.	Alternative Modes of Operation (Emissi	ions Trading):
	Attached, Document ID:	Not Applicable
Ad	ditional Requirements Comment	
_	-	

#### **EMISSIONS UNIT INFORMATION** Section [2] of [4]

**Clinker Handling** 

#### 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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes 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.

**Clinker Handling** 

Section [2] of [4]

#### A. GENERAL EMISSIONS UNIT INFORMATION

## <u>Title V Air Operation Permit Emissions Unit Classification</u>

1.	•	air operation permit. Sonly.)		•
	emissions unit			on Section is a regulated
	The emissions unregulated en	unit addressed in this Enissions unit.	missions Unit Informati	on Section is an
<u>E</u> n	nissions Unit Descr	ription and Status		
1.	Type of Emissions	Unit Addressed in this	Section: (Check one)	
	single process	s Unit Information Secti or production unit, or ac which has at least one d	ctivity, which produces of	one or more air
	of process or p		vities which has at least	e emissions unit, a group one definable emission
		s Unit Information Section production units and a		e emissions unit, one or fugitive emissions only.
2.	Description of Emissions Unit Addressed in this Section: Cement Plant Clinker Handling & Storage System			
3.	Emissions Unit Ide	entification Number: 02	.7	
4.	Emissions Unit	5. Commence	6. Initial Startup	7. Emissions Unit
	Status Code: A	Construction Date:	Date:	Major Group SIC Code: <b>32</b>
8.	Federal Program A	applicability: (Check all	that apply)	
	Acid Rain Unit	t		
	CAIR Unit			
9.	Package Unit: Manufacturer:		Model Number:	
	Generator Namepl			
11.	Emissions Unit Co Adding clinker co	omment:  onveyor to input stored	clinker into processin	g system

## EMISSIONS UNIT INFORMATION

Section [2] of [4] Clinker Handling

## Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description: Fabric Filter Low Temperature

2. Control Device or Method Code: 018

### B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

## **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughput Rate	e:	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate: million B	tu/hr	
4.	Maximum Incineration Rate: pounds/	hr	
	tons/day	1	
5.	Requested Maximum Operating Sched	lule:	
	hour	rs/day	days/week
	wee	ks/year	8,760 hours/year
6	O		
6.	Operating Capacity/Schedule Commer	nt:	
	Production is automatically limited		s established for
			s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for
	Production is automatically limited		s established for

### C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

## **Emission Point Description and Type**

Emission I ont Description			
1. Identification of Point on Flow Diagram: EU027	Plot Plan or	2. Emission Point	Гуре Code:
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Baghouse I.D. 441.BF540 Baghouse I.D. 481.BF140 Baghouse I.D. 481.BF330 Baghouse I.D. 481.BF540 Baghouse I.D. 481.BF640 Baghouse I.D. 481.BF730 Baghouse I.D. 481.BF930 Baghouse I.D. F-633 Baghouse K-447			
4. ID Numbers or Descriptio	ns of Emission Ur	nits with this Emission	1 Point in Common:
5. Discharge Type Code:	6. Stack Height feet	:	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volur Acfm	netric Flow Rate:	10. Water Vapor:
11. Maximum Dry Standard Flow Rate: 12. Nonstack Emission Point Height: feet		on Point Height:	
13. Emission Point UTM Coordinates  Zone: East (km):  North (km):		14. Emission Point I Latitude (DD/M Longitude (DD/N	·
15. Emission Point Comment:			

## Section [2] of [4]

## D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1.	Segment Description (Proc Mineral Products → Cen	V 1 /		ocess -> Clinker Transfer
2.	Source Classification Code	e (SCC):	3. SCC Units:	
	30500616		Tons Cement	Processed
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit:
10.	Segment Comment:			

### E. EMISSIONS UNIT POLLUTANTS

## List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	4. Pollutant Regulatory Code
PM	018		
PM10	018		
			_
			_
_			
			-
			-

## EMISSIONS UNIT INFORMATION Section [2] of [4]

## POLLUTANT DETAIL INFORMATION Page [1] of [2]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

	TTO OCCUPATION DIMENSIONS	
1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:	
3. Potential Emissions:	4. Synthetically Limited?	
lb/hour <b>19.7</b> 0	tons/year Yes X No	
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	
6. Emission Factor:	7. Emissions	
	Method Code:	
Reference:		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:	
tons/year	From: To:	
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:	
tons/year	5 years 10 years	
10. Calculation of Emissions:		
Annual emissions potential based on reasonable assurance, as described in 0250020-033-		
AV, Condition C.1.note		
Engitive emissions from new convening equip	mont determined in Attachment 1	
Fugitive emissions from new conveying equip	ment determined in Attachment 1.	
11. Potential, Fugitive, and Actual Emissions Co	omment:	
<del>-</del>		

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

### EMISSIONS UNIT INFORMATION Section [2] of [4]

## POLLUTANT DETAIL INFORMATION Page [2] of [2]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour 19.70	4. Synthetically Limited?  The tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period:  5 years 10 years
10. Calculation of Emissions: Annual emissions potential based on reasonable assurance, as described in 0250020-033 AV, Condition C.1.note  Fugitive emissions from new conveying equipment determined in Attachment 1.	
11. Potential, Fugitive, and Actual Emissions Co	omment:

## POLLUTANT DETAIL INFORMATION Page [2] of [2]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

#### **EMISSIONS UNIT INFORMATION**

Section [2] of [4]

Clinker Handling

#### G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: VE05	2. Basis for Allowable	Opacity:
		x Rule	Other
3.	Allowable Opacity:		
	Normal Conditions: 05 %	Exceptional Conditions:	%
	Maximum Period of Excess Opacity Allov	wed:	min/hour
4.	Method of Compliance: METHOD 22		
5.	Visible Emissions Comment:		
40	CFR 63 Subpart LLL		

## EMISSIONS UNIT INFORMATION

Section [2] of [4] Clinker Handling

### H. CONTINUOUS MONITOR INFORMATION

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

No Continuous Monitoring information submitted.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

#### 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: 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: x 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: 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: x Previously Submitted, Date On File with DEP
6. 7.	Compliance Demonstration Reports/Records:  Attached, Document ID:  Test Date(s)/Pollutant(s) Tested:  Test Date(s)/Pollutant(s) Tested:  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.  Other Information Required by Rule or Statute:
/.	Attached, Document ID: Not Applicable

### I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

### **Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(10) 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 (Rules 62-212.400(4)(d) and 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
Identification of Applicable Requirements:     Attached, Document ID:
2. Compliance Assurance Monitoring:
Attached, Document ID: Not Applicable
3. Alternative Methods of Operation:
Attached, Document ID: Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: Not Applicable
Additional Requirements Comment

#### EMISSIONS UNIT INFORMATION [3] of [4] Section

Pyroprocessing and Raw Mill

#### 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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes 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.

DEP Form No. 62-210.900(1) - Form 654-12-12 44

Effective: 03/11/2010

Section [3] of [4]

Pyroprocessing and Raw Mill

#### 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.					
		unit addressed in this E	miss	sions Unit Informati	on S	Section is an
<u>En</u>	nissions Unit Descr	iption and Status				
1.	Type of Emissions	Unit Addressed in this	Sec	tion: (Check one)		
	single process	s Unit Information Section or production unit, or action which has at least one do	tivi	ty, which produces	one	or more air
	of process or p	s Unit Information Section of the section units and active vent) but may also produced the section of the secti	⁄itie	es which has at least		
		S Unit Information Sections of the section of the s		, ,		•
2.	•	issions Unit Addressed in the control of the contro				
3.	Emissions Unit Ide	entification Number: 02	8			
4.	Emissions Unit Status Code: A	5. Commence Construction Date:	6.	Initial Startup Date: June 30, 2004	7.	Emissions Unit Major Group SIC Code: <b>32</b>
8.	Federal Program A	pplicability: (Check all	tha	t apply)		
	☐ Acid Rain Unit	:				
	CAIR Unit					
9.	Package Unit: Manufacturer:			Model Number:		
10.	Generator Namepla	ate Rating: MW				
11.	1. Emissions Unit Comment: Includes In Line Kiln/Raw Mill, 4-Raw Mill Cyclone Separators, Controlled Feed Blend Silo, Preheater/Calciner tower, Kiln Dust Bin and Clinker Cooler. Request to include whole tires as applicable fuel and calcium carbonate residuals as raw material substitute.					

#### **EMISSIONS UNIT INFORMATION**

Section [3] of [4]

Pyroprocessing and Raw Mill

#### Emissions Unit Control Equipment/Method: Control 1 of 2

1. Control Equipment/Method Description:

Fabric Filter High Temperature

2. Control Device or Method Code: 016

#### Emissions Unit Control Equipment/Method: Control 2 of 2

1. Control Equipment/Method Description: Fabric Filter Medium Temperature

2. Control Device or Method Code: 017

### Pyroprocessing and Raw Mill

### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

#### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughput Rate: 2,190,000 TPY	
2.	Maximum Production Rate:	
3.	Maximum Heat Input Rate: million Btu/hr	<del>-</del>
4.	Maximum Incineration Rate: pounds/hr	
	tons/day	
5.	Requested Maximum Operating Schedule:	
	hours/day	days/week
	weeks/year	8760 hours/year
6.	Operating Capacity/Schedule Comment:  250 TPH clinker based on a 24-hour block average and 2,190,0	00 TPY

### 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: Cement Plant		2. Emission Point Type Code: 3			
	Pyroprocessing and Raw					
3.						
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:						
5.	Discharge Type Code: V	6. Stack Height 412 feet	•	7. Exit Diameter: 14feet		
8.	Exit Temperature: 350 °F	9. Actual Volum 620,000 Acfu	netric Flow Rate:	10. Water Vapor: 11 %		
11.	Maximum Dry Standard Flow Rate:     350,000 dscfm		12. Nonstack Emission Point Height: feet			
13.	13. Emission Point UTM Coordinates Zone: East (km): North (km):		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)			
15.	North (km):  Longitude (DD/MM/SS)  15. Emission Point Comment:  331.BF200 limited to 10%; All others limited to 5% instead of PM testing.					

Section [3] of [4] Pyroprocessing and Raw Mill

### D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1.	Segment Description (Process/Fuel Type):     Raw Mill						
2	Source Classification Code	• (SCC)·	3. SCC Units:				
۷.	30500612	c (SCC).		Mat	terial Handled Per Year		
4.	Maximum Hourly Rate:	5. Maximum 3,723,000	Annual Rate:	6.	Estimated Annual Activity Factor:		
7.	Maximum % Sulfur:	8. Maximum (	% Ash:	9.	Million Btu per SCC Unit:		
10.	Segment Comment:  Calcium carbonate addi	tions					
Seg	gment Description and Ra	te: Segment 2 o	f <u>2</u>				
1.	Segment Description (Prod	cess/Fuel Type):			-		
Industrial Processes; In-Process Fuel Use; Alternative Fuel; Whole Tires (TDF)							
2.	Source Classification Code 3-90-012-99	e (SCC):	3. SCC Units: Tons Burned				
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:		
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit:		
10.	Segment Comment:						

#### **E. EMISSIONS UNIT POLLUTANTS**

### List of Pollutants Emitted by Emissions Unit

2300 01 1 014 detailed 25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						
1. Pollutant Er	nitted 2. Primary Device		B. Secondary Control Device Code	4. Pollutant Regulatory Code		
	Device	Code	Device Code	Regulatory Code		
CO						
D/F						
H106						
H114						
HAPS	016					
NOX						
PB						
PM	016					
PM10	016					
SAM			-	-		
SO2				-		
VOC						
			-			
				-		
				-		

## POLLUTANT DETAIL INFORMATION Page [1] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1 otential, Estimated Tugitive, and Dasenne o	e i i o jecteu i ictuali zimis	310113			
1. Pollutant Emitted: CO	2. Total Percent Efficie	ency of Control:			
3. Potential Emissions:	4. Synth	netically Limited?			
		Yes No			
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):				
6. Emission Factor: 576 lb/hr, 2.0 lb/ton clin	ker	7. Emissions			
		Method Code: 1			
Reference: Permit No. 0250020-033-AV					
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:			
tons/year	From:	Го:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:				
tons/year	5 years 10 years				
11. Potential, Fugitive, and Actual Emissions Comment:					

## POLLUTANT DETAIL INFORMATION Page [1] of [12]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: BACT	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 2.0 lb/ton clinker (30 day)	4.	Equivalent Allowable Emissions: 576 lb/hour (24-hr) tons/year
5.	Method of Compliance: CEMS/METHOD 10		
6.	Allowable Emissions Comment (Description	of (	Operating Method):

### POLLUTANT DETAIL INFORMATION Page [2] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

rotential, Estimated rugitive, and Daseinle &	t I i o je titu Actuai Emissions			
1. Pollutant Emitted: <b>D/F</b>	2. Total Percent Efficiency of Control:			
3. Potential Emissions: lb/hour	4. Synthetically Limited?  tons/year X Yes No			
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 0.2 ng TEQ/dscm (T≥204 0.4 ng TEQ/dscm (T<204 Reference: Permit No. 0250020-033-AV				
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:			
tons/year	From: To:			
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period:  5 years 10 years			
10. Calculation of Emissions:				
11. Potential, Fugitive, and Actual Emissions Comment:				

## POLLUTANT DETAIL INFORMATION Page [2] of [12]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

#### Allowable Emissions 1 of 2

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Dat Emissions:	e of Allowable
3.	Allowable Emissions and Units: 0.2 ng TEQ/dscm (T≥204°C)	4.	Equivalent Allowabl lb/hour	e Emissions: tons/year
5.	5. Method of Compliance: METHOD 23 (30 month interval per NESHAP LLL)			
6.	Allowable Emissions Comment (Description	of (	Operating Method):	

#### Allowable Emissions 2 of 2

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date Emissions:	of Allowable	
3.	Allowable Emissions and Units: 0.4 ng TEQ/dscm (T<204°C)	4.	Equivalent Allowable lb/hour	e Emissions: tons/year	
5.	5. Method of Compliance: METHOD 23 (30 month interval per NESHAP LLL)				
6.	Allowable Emissions Comment (Description	of (	Operating Method):		

### POLLUTANT DETAIL INFORMATION Page [3] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: H106	2. Total Percent Effici	ency of Control:			
3. Potential Emissions:	4. Synt	hetically Limited?			
	tons/year	•			
	7 (0113/ ) (11				
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):				
6. Emission Factor: 1.847 lb/hr		7. Emissions			
		Method Code:			
Reference: 2009 stack test data		3A			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:			
tons/year	From:	Го:			
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitor	ing Period:			
tons/year	5 years 1	0 years			
10. Calculation of Emissions:					
10. Calculation of Emissions.					
11. Potential, Fugitive, and Actual Emissions Comment:					
11. Folential, Fugitive, and Actual Emissions Comment.					

## POLLUTANT DETAIL INFORMATION Page [3] of [12]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

### POLLUTANT DETAIL INFORMATION Page [4] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

I Otential, Estimated Fugitive, and Dascine o	t I Tojecteu Actual Elitissions				
1. Pollutant Emitted: H114	2. Total Percent Efficiency of Control:				
3. Potential Emissions:	4. Synthetically Limited?				
	5 tons/year X Yes No				
	tons/ year				
<ol><li>Range of Estimated Fugitive Emissions (as to tons/year</li></ol>	applicable):				
6. Emission Factor: 229 lb/year	7. Emissions				
-	Method Code: 2				
Reference: Permit No. 0250020-033-AV					
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:				
tons/year	From: To:				
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:				
tons/year	☐ 5 years ☐ 10 years				
10. Calculation of Emissions:  (229 lb/yr) x (ton/2000 lb) = 0.1145 ton/yr					
11. Potential, Fugitive, and Actual Emissions Comment:					

## POLLUTANT DETAIL INFORMATION Page [4] of [12]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 2

1.	Basis for Allowable Emissions Code: OTHER; AVOID PSD	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:  Material balance		
6.	Allowable Emissions Comment (Description Based on Permit No. 0250020-033-AV: 229		

## POLLUTANT DETAIL INFORMATION Page [5] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

r otential, Estimated rugitive, and Dasenne e	x 110 cetea Actual Eliissions		
1. Pollutant Emitted: HAPS	2. Total Percent Efficiency of Control:		
3. Potential Emissions: 40.7 lb/hour 173	4. Synthetically Limited?  **Tons/year** X Yes \( \subseteq \  \text{No} \)		
5. Range of Estimated Fugitive Emissions (as to tons/year			
6. Emission Factor:  Reference:	7. Emissions Method Code: 3B		
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:		
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period:  5 years 10 years		
11. Potential, Fugitive, and Actual Emissions C	omment:		

## POLLUTANT DETAIL INFORMATION Page [5] of [12]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

### POLLUTANT DETAIL INFORMATION Page [6] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

I Ottiliai, Estimated Fugitive, and Dastine o	t I Tojecteu Metual Billio	310113		
1. Pollutant Emitted: NOX	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:	4. Synth	netically Limited?		
		Yes No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 2.17 lb/ton clinker (365-	day rolling)	7. Emissions Method Code: 1		
Reference: PSD avoidance (365-day rolling)				
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:		
tons/year	From:	Co:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:		
tons/year		0 years		
10. Calculation of Emissions: (2.17 lb/ton) x (2,190,000 ton clinker/yr) x (ton/2000 lb) = 2,376 ton/yr				
11. Potential, Fugitive, and Actual Emissions Co	omment:			

## POLLUTANT DETAIL INFORMATION Page [6] of [12]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER; AVOID PSD	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 2,376 ton/yr	4.	Equivalent Allowable Emissions: 2,376 tons/year
5.	Method of Compliance: CEMS		
6.	Allowable Emissions Comment (Description PSD avoidance allowable emissions as disc		

### POLLUTANT DETAIL INFORMATION Page [7] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

I otential, Estimated Fugitive, and Dasenne of	c i rojecteu rictuur Biinis	310113
1. Pollutant Emitted: <b>PB</b>	2. Total Percent Efficient	ency of Control:
3. Potential Emissions: 0.00207 lb/hour 0.0034	•	netically Limited? Yes
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):	
6. Emission Factor: see below	haad ay Daw Mill IIa	7. Emissions Method Code:
Reference: 2009 stack test (assume all emissions		3A
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:
tons/year	From:	Го:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitori  5 years 1	ng Period: 0 years
10. Calculation of Emissions: Stack Test November 2009 0.00207 lb/hr Mill On 0.0006 lb/hr Mill Off (0.00207 lb/hr) x (3248 hr/yr) x (ton/2000 lbs) =		

POLLUTANT DETAIL INFORMATION
Page [7] of [12]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

## POLLUTANT DETAIL INFORMATION Page [8] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficie	ency of Control:		
3. Potential Emissions:	4. Synth	netically Limited?		
26.8 lb/hour	-	Yes No		
	10110/ ) 041	105		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 0.063 lb/ton dry kiln feed	d (3-hr avg); 26.8 lb/hr	7. Emissions		
, in the second	<b>.</b>	Method Code:		
Reference: 0250020-033-AV		3A		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:		
tons/year	From:	To:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:		
tons/year	•	0 years		
10. Calculation of Emissions:	<u> </u>	-		
11. Potential, Fugitive, and Actual Emissions Comment:				

POLLUTANT DETAIL INFORMATION
Page [8] of [12]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:  0.063 lb/ton of dry kiln feed	4.	Equivalent Allowable Emissions:  26.8 lb/hour tons/year
5.	Method of Compliance: METHOD 5		
6.	Allowable Emissions Comment (Description	of (	Operating Method):

## POLLUTANT DETAIL INFORMATION Page [9] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

4 7 11 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1	0 T 10 100 1			
1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:			
3. Potential Emissions:	4. Synthetically Limited?			
22.5 lb/hour	tons/year Yes X No			
5. Range of Estimated Fugitive Emissions (as	s applicable):			
to tons/year				
6. Emission Factor: 0.053 lb/ton dry kiln feed	d (3-hr avg); 22.5 lb/hr 7. Emissions			
·	Method Code:			
Reference: 0250020-033-AV	3 <b>A</b>			
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:			
tons/year	From: To:			
•				
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:			
tons/year	5 years 10 years			
10. Calculation of Emissions:				
Using Method 5 results, assume all PM equal	to PM10			
Using Method 5 results, assume all 1 M equal to 1 MX10				
11. Potential, Fugitive, and Actual Emissions Comment:				
,,,,				

## POLLUTANT DETAIL INFORMATION Page [9] of [12]

## F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.053 lb/ton of dry kiln feed	4.	Equivalent Allowable Emissions: 22.5 lb/hour tons/year
5.	5. Method of Compliance:  METHOD 5 (assume all PM equal to PM10)		
6.	Allowable Emissions Comment (Description	of (	Operating Method):

### POLLUTANT DETAIL INFORMATION Page [10] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1 Otential, Estimated Fugitive, and Dasenne o	t Tojettu Actual Ellis	910113		
Pollutant Emitted: SAM	2. Total Percent Efficient	ency of Control:		
3. Potential Emissions: 1.14 lb/hour 5.69	1	netically Limited? Yes No		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 1.14 lb/hr		7. Emissions Method Code:		
Reference: 2004 stack test data 1.14 lb/hr, 0.0	0052 lb/ton clinker	3A		
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month	Period:		
tons/year	From:	Го:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitori	ng Period:		
tons/year		0 years		
10. Calculation of Emissions: (0.0052 lb/ton clinker) x (2,190,000 ton clinker/yr) x (ton/2000 lbs) = 5.69 ton/yr				
11. Potential, Fugitive, and Actual Emissions Comment:				

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

654-12-12

POLLUTANT DETAIL INFORMATION
Page [11] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Totellual, Estimated Fugitive, and Daseine e	e i rojecteu Ac	tuai Eillis	310113	
1. Pollutant Emitted: SO2	2. Total Perc	ent Efficie	ency of Control:	
3. Potential Emissions:		4. Synth	netically Limited?	
	P tomo/vioon	•	Yes No	
	8 tons/year	اثا		
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):			
6. Emission Factor: 0.50 lb/ton clinker (30-d	ay avg.); 320 ll	b/hr	7. Emissions Method Code: 1	
Reference: 0250020-033-AV			Method Code. 1	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:	
tons/year	From:	7	Го:	
9.a. Projected Actual Emissions (if required):	9.b. Projected	l Monitori	ng Period:	
tons/year	☐ 5 yea	ars 🔲 l	0 years	
10. Calculation of Emissions: (0.50 lb/ton clinker) x (2,190,000 ton clinker/yr) x (ton/2000 lb) = 548 ton/yr				
11. Potential, Fugitive, and Actual Emissions Co	omment:			

## POLLUTANT DETAIL INFORMATION Page [11] of [12]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER; AVOID PSD	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.50 lb/ton clinker (30-day avg)	4.	Equivalent Allowable Emissions: 320 lb/hour (24-hr avg) tons/year
5.	Method of Compliance: CEMS.METHOD 6 OR 6C		
6.	Allowable Emissions Comment (Description Based on Permit No. 0250020-033-AV	of (	Operating Method):

## POLLUTANT DETAIL INFORMATION Page [12] of [12]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1 Otential, Estimated Fugitive, and Daseine o	t Hojecica Actu	aai Liiiis	31043		
1. Pollutant Emitted: VOC	2. Total Percer	nt Efficie	ncy of Control:		
3. Potential Emissions:	4	4. Synth	etically Limited?		
	5 tons/year	•	Yes □ No		
		ٔ لت			
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year					
6. Emission Factor: 0.16 lb/ton clinker (30-d	6. Emission Factor: 0.16 lb/ton clinker (30-day avg); 40 lb/hr 7. Emissions Method Code: 1				
Reference: 0250020-033-AV					
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24	4-month	Period:		
tons/year	From:	T	o:		
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:				
tons/year	5 years 10 years				
10. Calculation of Emissions: (0.16 lb/ton clinker) x (2,190,000 ton clinker/yr) x (ton/2000 lb) = 175 ton/yr					
11. Potential, Fugitive, and Actual Emissions Comment:					

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER; AVOID PSD	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.16 lb/ton clinker (30-day avg)	4.	Equivalent Allowable Emissions: 40 lb/hour (24-hr avg)
5.	Method of Compliance: CEMS/METHOD 25 OR 25A		
6.	Allowable Emissions Comment (Description Based on Permit No. 0250020-033-AV	of (	Operating Method):

#### **EMISSIONS UNIT INFORMATION**

Section [3] of [4]

Pyroprocessing and Raw Mill

#### G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: VE05	2. Basis for Allowable Rule	Opacity:  Other		
3.	Allowable Opacity:				
	Normal Conditions: 5 % Ex	ceptional Conditions:	%		
Maximum Period of Excess Opacity Allowed: min/hour					
4.	Method of Compliance: EPA Method 9, A	nnually			
5.	Visible Emissions Comment: 10% opacity	limit per Rule 40 CFR	53.1348 (NESHAP		
5. Visible Emissions Comment: 10% opacity limit per Rule 40 CFR 63.1348 (NESHAP Subpart LLL); however Tarmac America has accepted 5% opacity limitation per Rule 62-297.620(4) in lieu of PM testing requirements.					

#### H. CONTINUOUS MONITOR INFORMATION

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

Continuous Monitoring System: Continuous Monitor 1 of 2

Constitution of the contract o			
1.	Parameter Code: EM	2. Pollutant(s): NOX, SO2, CO, VOC	
3.	CMS Requirement:		Rule X Other
4.	Monitor Information  Manufacturer: Information in DEP file  Model Number:		Serial Number:
5.		6. Performance Specification Test Date:	
7.	Continuous Monitor Comment:  Required to demonstrate compliance with of Title V Permit No. 0250020-033-AV. Co		
<u>Co</u>	ontinuous Monitoring System: Continuous	Mor	onitor <u>2</u> of <u>2</u>
1.	Parameter Code: OTHER		2. Pollutant(s): Opacity
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: Reviously 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: Reviously 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: x Previously Submitted, Date
6.	Compliance Demonstration Reports/Records:  Attached, Document ID:  Test Date(s)/Pollutant(s) Tested:  Previously Submitted, Date: On File with DEP  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

Pyroprocessing and Raw Mill

### I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

### **Additional Requirements for Air Construction Permit Applications**

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),				
F.A.C.; 40 CFR 63.43(d) and (e)):	ETNIA Ameliada			
Attached, Document ID:				
2. Good Engineering Practice Stack Height	Analysis (Rules 62-212.400(4)(d) and 62-			
212.500(4)(f), F.A.C.):				
Attached, Document ID:				
3. Description of Stack Sampling Facilities: only)	(Required for proposed new stack sampling facilities			
Attached, Document ID:	Not Applicable			
Additional Requirements for Title V Air O	peration Permit Applications			
1. Identification of Applicable Requirem				
Attached, Document ID:	<u>-</u>			
2. Compliance Assurance Monitoring:				
Attached, Document ID:	Not Applicable			
3. Alternative Methods of Operation:				
Attached, Document ID:	▼ Not Applicable			
4. Alternative Modes of Operation (Emis	esions Trading):			
Attached, Document ID:	<u> </u>			
Additional Requirements Comment				

**Fugitive Emissions** 

#### 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 an initial, revised or renewal 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. 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 an 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 or 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. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes 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.

#### A. GENERAL EMISSIONS UNIT INFORMATION

#### Title V Air Operation Permit Emissions Unit Classification

1.	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.)					
	<ul> <li>☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</li> <li>☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</li> </ul>					
Er	nissions Unit Desc	ription and Status	_			
1.	Type of Emissions	S Unit Addressed in this	Section: (Check one)			
	single process	s Unit Information Secti or production unit, or ac which has at least one d	tivity, which produces	one or more air		
	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.					
		s Unit Information Section production units and a	- · · · · · · · · · · · · · · · · · · ·	e emissions unit, one or fugitive emissions only.		
2.	2. Description of Emissions Unit Addressed in this Section: Facility-wide particulate matter fugitive emissions from misc. activities, such as truck operations throughout the facility, wind erosion, coal tripper system etc. Fugitive Emissions – Transportation, Miscellaneous Transfers, and Storage					
3.		entification Number: 03		,		
4.	Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: <b>32</b>		
8.	8. Federal Program Applicability: (Check all that apply)  Acid Rain Unit  CAIR Unit					
9.	Package Unit: Manufacturer:		Model Number:			
10.	10. Generator Nameplate Rating: MW					
11.	11. Emissions Unit Comment:  Addition of insignificant activities					

## EMISSIONS UNIT INFORMATION

Section [4] of [4]

**Fugitive Emissions** 

### Emissions Unit Control Equipment/Method: Control 1 of 1

1. Control Equipment/Method Description:
Water Sprays

2. Control Device or Method Code: 153

#### **B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Process or Throughput Rate:	
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: hours/day	days/week
	weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule Comment:	

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

### **Emission Point Description and Type**

1.	Identification of Point on	Plot Plan or	2. Emission Point Type Code:		
	Flow Diagram: EU031		4- No true emission point		
	Descriptions of Emission				
	4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:				
5.	Discharge Type Code: <b>F</b>	6. Stack Height feet	:	7. Exit Diameter: feet	
8.	Exit Temperature: Ambient	9. Actual Volum Acfm	Actual Volumetric Flow Rate: 10. V		
11.	Maximum Dry Standard F dscfm	low Rate:	nte: 12. Nonstack Emission Point F feet		
13.	Emission Point UTM Coo	rdinates	14. Emission Point Latitude/Longitude		
	Zone: East (km):		Latitude (DD/MM/SS)		
		Longitude (DD/N	MM/SS)		
13.	Emission Point Comment:				

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

**Fugitive Emissions** 

## D. SEGMENT (PROCESS/FUEL) INFORMATION

### Segment Description and Rate: Segment 1 of 4

1.	Segment Description (Proc Raw Material Blending	cess/Fuel Type):			
_	G Cl. 'C' C1	(0.00)	2 00011.7		
2.	Source Classification Code 30500612	e (SCC):	3. SCC Units: Tons Material		dled
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:		Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:
10.	. Segment Comment:			_	
1.	Segment Description and Rate: Segment 2 of 4  1. Segment Description (Process/Fuel Type): Truck Traffic				
2.	2. Source Classification Code (SCC): 30500699  3. SCC Units: Tons Cement Produced			uced	
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	ı	Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9.	Million Btu per SCC Unit:
10.	Segment Comment:				

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

### D. SEGMENT (PROCESS/FUEL) INFORMATION

## Segment Description and Rate: Segment 3 of 4

1.	Segment Description (Proc Coal Conveyors and Trip	• • ′	_	
2.	2. Source Classification Code (SCC): 30510103  3. SCC Units: Tons Material Handled			
4.	Maximum Hourly Rate:	5. Maximum	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:
10.	. Segment Comment:			
Ses	gment Description and Ra	ite: Segment 4 o	of <u>4</u>	
1. Segment Description (Process/Fuel Type): Coal Unloading from Railcars and Trucks				
2.	2. Source Classification Code (SCC): 30510403  3. SCC Units: Tons Material Produced		Produced	
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6. Estimated Annual Activity Factor:
7.	Maximum % Sulfur:	8. Maximum 9	% Ash:	9. Million Btu per SCC Unit:
10.	Segment Comment:		'	

### 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	Water Sprays		
PM10	Water Sprays		

# POLLUTANT DETAIL INFORMATION Page [1] of [2]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour 27.6	4. Synthetically Limited?  tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor:  Reference:	7. Emissions Method Code:
	0.1 Dec 11 - 24 4 De 1-1
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	
10. Calculation of Emissions:	
As estimated in 0250020-33-AV	
11. Potential, Fugitive, and Actual Emissions Co	omment:

Effective: 03/11/2010 87

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

88

# POLLUTANT DETAIL INFORMATION Page [2] of [2]

# F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 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 operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

#### Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions:    lb/hour   7.6	4. Synthetically Limited?  5 tons/year Yes X No
5. Range of Estimated Fugitive Emissions (as to tons/year	s applicable):
6. Emission Factor:	7. Emissions Method Code:
Reference:	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline 24-month Period:
tons/year	From: To:
9.a. Projected Actual Emissions (if required):	9.b. Projected Monitoring Period:
tons/year	5 years 10 years
10. Calculation of Emissions:	
As estimated in 0250020-33-AV	
11. Potential, Fugitive, and Actual Emissions Co	omment:

POLLUTANT DETAIL INFORMATION
Page [1] of [2]

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

No pollutant allowable emissions information submitted.

DEP Form No. 62-210.900(1) – Instructions Effective: 03/11/2010

#### **EMISSIONS UNIT INFORMATION**

Section [4] of [4]

**Fugitive Emissions** 

#### G. VISIBLE EMISSIONS INFORMATION

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1.	Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity:  Rule  Other	
3.	Allowable Opacity: Normal Conditions: 20 %	Exceptional Conditions: %	
	Maximum Period of Excess Opacity Allo	owed: min/hour	
4.	Method of Compliance:		
	Visible Emissions Comment:		
Ru	ıle 62-296.320, F.A.C.		

**Fugitive Emissions** 

#### H. CONTINUOUS MONITOR INFORMATION

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

No Continuous Monitoring information submitted.

DEP Form No. 62-210.900(1) – Instructions Effective: 03/11/2010

92

### 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: x Previously Submitted, Date On File with DEP
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: x Previously Submitted, Date On File with DEP
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: 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:
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

**Fugitive Emissions** 

### I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

### Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),
F.A.C.; 40 CFR 63.43(d) and (e)):  Attached, Document ID: X Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-
212.500(4)(f), F.A.C.):
Attached, Document ID: X Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
Attached, Document ID: X Not Applicable
Additional Requirements for Title V Air Operation Permit Applications
1. Identification of Applicable Requirements:
Attached, Document ID:
2. Compliance Assurance Monitoring:  Attached, Document ID: Not Applicable
3. Alternative Methods of Operation:  Attached, Document ID: X Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
Attached, Document ID: Not Applicable
Additional Requirements Comment