

From: [Ramirez, Javier](#)
To: [Ramirez, Javier](#)
Subject: FW: 307_18_07 CEMEX Brooksville South AFM Application, Permit 22787-004-SO/31
Date: Thursday, August 09, 2018 2:42:20 PM
Attachments: [307_18_07_CEMEX_SW_RenewApp_2018_08_08_Final.pdf](#)
Importance: High

From: Tammy Garcia [mailto:tgarcia@kooglerassociates.com]
Sent: Wednesday, August 08, 2018 2:21 PM
To: Morgan, Steve <Steve.Morgan@dep.state.fl.us>
Cc: Ramirez, Javier <Javier.Ramirez@dep.state.fl.us>; Dr. Max Lee <mlee@kooglerassociates.com>; Brent C Steele (brentc.steele@cemex.com) <brentc.steele@cemex.com>; Robin G Simons (robing.simons@cemex.com) <robing.simons@cemex.com>; 'alberto.calleros@cemex.com' <alberto.calleros@cemex.com>
Subject: RE: 307_18_07 CEMEX Brooksville South AFM Application, Permit 22787-004-SO/31
Importance: High

Steve,

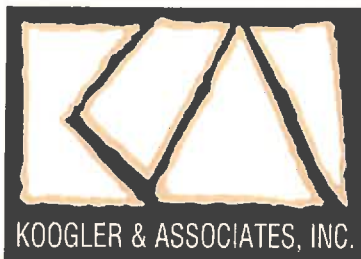
Please find attached the permit renewal application package for the CEMEX Brooksville South Solid Waste AFM Operations. CEMEX will be paying the fee on-line today as soon as they receive confirmation and the link for the payment.

If you need additional information, please contact me.

Thank you,
Tammy

Tammy L. Garcia
Environmental Scientist II
Koogler and Associates, Inc.
www.kooglerassociates.com
Mail: PO Box 5127 |Gainesville, FL 32627-5127
Physical: 4014 NW 13th Street |Gainesville, FL 32609
Office: 352 377 5822 x27 |Direct: 352 792 1104
Fax: 352 377 7158 |Mobile: 352 339 0448
tgarcia@kooglerassociates.com

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307-18-07
August 8, 2018

Mailing: Post Office Box 5127
Gainesville, FL 32627-5127
Physical: 4014 NW 13th Street
Gainesville, FL 32609-1923
www.kooglerassociates.com
352.377.5822

Steve Morgan
FDEP - SW District - Solid Waste Section
13051 North Telecom Park, Suite 101
Temple Terrace, FL 33637-0926

**RE: *Alternative Fuel/Material Permit Renewal Application, 62-701, FAC
Brooksville South Cement Plant-CEMEX Construction Materials Florida, LLC
Brooksville, Hernando County, Florida
Current Permit No. 22787-004-SO/31; WACS ID SWD-27-40778***

Dear Mr. Morgan:

On behalf of CEMEX Construction Materials Florida, LLC (CEMEX), Koogler and Associates, Inc. is submitting the attached application package for the renewal of their permit for storage, handling and processing of alternative fuel/materials (AFM) at the Brooksville South Cement Plant. This application reduces the storage capacity by 100 tons (4900 tons to 4800 tons) as the outside trailer storage area has been removed. Outside trailer storage is now located off-site on the Gregg Mine property. AFM remains only permitted for air emissions in Kiln 2 at this time.

Enclosed is one (1) original DEP Form #62-701.900(4) and attachments. CEMEX will be submitting the application fee of \$1000 on-line today, August 8, 2018. A copy of the application package was also emailed to you on this date.

If you have any questions regarding this application or require further information, please contact me at (352) 377-5822 or tgarcia@kooglerassociates.com.

Regards,

Tammy L. Garcia
Environmental Scientist II

/tlg

Enclosures

cc: Brent Steele - CEMEX Construction Materials Florida, LLC (Email)
 Maxwell R. Lee - Koogler and Associates, Inc. (Email)

**APPLICATION TO RENEW PERMIT
TO OPERATE AN
ALTERNATIVE FUEL MATERIAL
PROCESSING FACILITY**

CEMEX Construction Materials Florida, LLC
Brooksville South Cement Plant
Brooksville, Hernando County, Florida

Permit No. 22787-004-SO/31
WACS ID No. SWD-27-40778

Application Date: August 6, 2018

Consultant:

Maxwell R. Lee, Ph.D., P.E.
Tammy L. Reed
Koogler and Associates, Inc.
4014 NW 13th Street
Gainesville, FL 32609-1923
(352) 377-5822

307-18-07



4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ■ FAX/377-7158

**APPLICATION FOR PERMIT RENEWAL TO OPERATE AN
ALTERNATIVE FUEL/MATERIAL PROCESSING FACILITY**

CEMEX Construction Materials Florida, LLC
Brooksville South Cement Plant
Brooksville, Hernando County, Florida

Application Date: August 6, 2018

Renewal of Permit 22787-004-SO/31
WACS ID No. SWD-27-40778

Consultant:

Maxwell R. Lee, Ph.D., P.E.
Tammy Garcia – Environmental Scientist
Koogler and Associates, Inc.
www.kooglerassociates.com
P.O. Box 5127
Gainesville, Florida 32627-5127
(352) 377-5822

307-18-07

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1.0 INTRODUCTION

CEMEX Construction Materials Florida, LLC (CEMEX) owns and operates the CEMEX Brooksville South Cement Plant (facility) located at 10311 Cement Plant Road in Brooksville, Hernando County, Florida. The facility includes two Portland Cement kiln lines and associated equipment capable of producing up to 2,004,000 tons of clinker per year. The cement Kiln No. 2 (Kiln 2) is currently permitted by the FDEP Air Section to burn natural gas, distillate fuel oil, on specification used oil, coal, petroleum coke, propane, flyash, tire derived fuels, and a variety of alternative fuel materials (AFM) (i.e., plastics; roofing materials; agricultural biogenic materials; untreated and treated cellulosic biomass; carpet-derived fuels; and engineered fuels) that are defined as "non-hazardous" under the rules of 40 CFR 260 (i.e., RCRA) regarding solid waste. Cement Kiln No. 1 is not permitted to use AFM. While the use of AFM has been determined by FDEP Solid Waste Department in Tallahassee to be not subject to Solid Waste permitting, CEMEX voluntarily committed to use solid waste permitting for AFM operations to ensure above and beyond required stewardship of environmental assurance compliance.

CEMEX believes that their AFM program will result in the following benefits:

1. Promotion of related recycling and recovery business activities (i.e., employment, taxable income) in the State.
2. Reduction of greenhouse gas emissions by re-using and reducing landfilled biogenic material, reducing source material transportation and reducing methane emissions from landfilled materials.
3. Increased demand for recovered materials encourages recovery versus landfilling. This matches the goals of the State efforts to increase waste diversion for re-use or recycling.¹
4. Promotion of a more diverse energy supply which improves the viability of CEMEX and promotes and supports the AFM market.

¹<http://www.dep.state.fl.us/waste/recyclinggoal75/default.htm> (last visited April 18, 2011)

2.0 BACKGROUND INFORMATION

2.1 Permitting

CEMEX is currently operating under Title V air operation permit no. 0530021-073-AV and includes the use of AFM as fuel in Kiln 2. The Title V permit incorporated the use of AFM for which AFM has been approved as of April 2012. Alternative fuels include tire-derived fuel; plastics; roofing materials; agricultural biogenic materials; untreated and treated cellulosic biomass; carpet-derived fuels; and, engineered fuels. Solid Waste Permit No. 22787-004-SO/31 was issued on October 7, 2013. This application is for the purpose of renewing that permit.

3.0 APPLICATION WITH SECTION B, ADDITIONAL INFORMATION

The following pages include the completed form, 62-7012.900(4) with the additional information required by the form provided in the following subsections.



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form #: 62-701.900(4), F.A.C.

Form Title: Application to Construct, Operate, or
Modify a Waste Processing Facility

Effective Date: February 15, 2015

Incorporated in Rule: 62-701.710(2), F.A.C.

APPLICATION TO CONSTRUCT, OPERATE, OR MODIFY A WASTE PROCESSING FACILITY

GENERAL REQUIREMENT: Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes (F.S.) and in accordance with Florida Administrative Code (F.A.C.) Chapter 62-701. A permit application shall be submitted in accordance with the requirements of Rule 62-701.320(5)(a), F.A.C., to the Department District Office having jurisdiction over the facility. The appropriate fee in accordance with subsection 62-701.315(4), F.A.C., shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP). Complete appropriate sections for the type of facility for which application is made and include all additional information, drawings, and reports necessary to evaluate the facility.

Please Type or Print in Ink

A. GENERAL INFORMATION

1. Type of facility (check all that apply):

☐ Transfer Station:

☐ C&D

☐ Class III

☐ Class I

☐ Other Describe: _____

☐ Materials Recovery Facility:

☐ C&D Recycling

☐ Class III MRF

☐ Class I MRF

☐ Other Describe: _____

☒ Other Facility That Processes But Does Not Dispose Of Solid Waste On-Site:

☐ Storage, Processing or Disposal for Combustion Facilities (not addressed in another permit)

☒ Other Describe: AFM Storage and Processing Facility

NOTE: C&D Disposal facilities that also recycle C&D, shall apply on DEP FORM 62-701.900(6), F.A.C.

2. Type of application:

☐ Construction/Operation

☒ Operation without Additional Construction

3. Classification of application:

☐ New

☐ Substantial Modification

☒ Renewal

☐ Intermediate Modification

☐ Minor Modification

4. Facility name: CEMEX Brooksville South Cement Plant

5. DEP ID number: 22787-004-SO/31 County: Hernando

6. Facility location (main entrance): 10311 Cement Plant Road, Brooksville, FL 34601

7. Location coordinates:
Section: 22 Township: 22S Range: 19E
Latitude: 28 ° 34 ' 54 " Longitude: 82 ° 25 ' 56 "
Datum: MGS84 Coordinate Method: Unknown
Collected by: N/A Company/Affiliation: N/A
8. Applicant name (operating authority): CEMEX Construction Materials Florida, LLC
Mailing address: 10311 Cement Plant Road Brooksville FL 34601
Street or P.O. Box City State Zip
Contact person: Alberto Calleros Telephone: (352) 799-7881
Title: Plant Manager alberto.calleros@cemexusa.com
E-Mail address (if available)
9. Authorized agent/Consultant: Koogler and Associates, Inc.
Mailing address: PO Box 5127; Gainesville FL 32627-5127
Street or P.O. Box City State Zip
Contact person: Tammy Garcia Telephone: (352) 799-7881
Title: Environmental Scientist II tgarcia@kooglerassociates.com
E-Mail address (if available)
10. Landowner (if different than applicant): N/A
Mailing address: _____
Street or P.O. Box City State Zip
Contact person: _____ Telephone: (352) _____
E-Mail address (if available)
11. Cities, towns and areas to be served: N/A
12. Date site will be ready to be inspected for completion: N/A
13. Estimated costs:
Total Construction: \$ N/A Closing Costs: \$ 300,297.80 including 10% contingency
14. Anticipated construction starting and completion dates:
From: N/A To: N/A
15. Expected volume of waste to be received: _____ yds³/day 240 tons/day

16. Provide a brief description of the operations planned for this facility: Receive and process alternative fuel materials (AFM) for Portland cement kiln. Note this facility does not intend to receive or process secondary materials that are identified as solid waste per 40 CFR 241.
This application is submitted to address the state of Florida regulatory matters.

B. ADDITIONAL INFORMATION

Please attach the following reports or documentation as required.

1. Provide a description of the operation of the facility that shall include (62-701.710(2)(a), F.A.C.):
 - a. The types of materials, i.e., wastes, recyclable materials or recovered materials, to be managed or processed;
 - b. The expected daily average and maximum weights or volumes of materials to be managed or processed;
 - c. How the materials will be managed or processed;
 - d. How the materials will flow through the facility including locations of the loading, unloading, sorting, processing and storage areas;
 - e. The types of equipment that will be used;
 - f. The maximum time materials will be stored at the facility;
 - g. The maximum amounts of wastes, recyclable materials, and recovered materials that will be stored at the facility at any one time; and
 - h. The expected disposition of materials after leaving the facility.
2. Attach a site plan, signed and sealed by a professional engineer registered under Chapter 471, F.S., with a scale not greater than 200 feet to the inch, which shows the facility location, total acreage of the site, and any other relevant features such as water bodies or wetlands on or within 200 feet of the site, potable water wells on or within 500 feet of the site (62-701.710(2)(b), F.A.C.).
3. Provide a boundary survey and legal description of the property (62-701.710(2)(c), F.A.C.).
4. Provide a construction plan, including engineering calculations, that describes how the applicant will comply with the design requirements of subsection 62-701.710(3), F.A.C. (62-701.710(2)(d), F.A.C.).
5. Provide an operation plan that describes how the applicant will comply with subsection 62-701.710(4), F.A.C. and the recordkeeping requirements of subsection 62-701.710(8), F.A.C. (62-701.710(2)(e), F.A.C.).
6. Provide a closure plan that describes how the applicant will comply with subsection 62-701.710(6), F.A.C. (62-701.710(2)(f), F.A.C.).
7. Provide a contingency plan that describes how the applicant will comply with subsection 62-701.320(16), F.A.C. (62-701.710(2)(g), F.A.C.).
8. Unless exempted by subparagraph 62-701.710(1)(d)1., F.A.C., provide the financial assurance documentation required by subsection 62-701.710(7), F.A.C. (62-701.710(2)(h), F.A.C.).
9. Provide a history and description of any enforcement actions by the applicant described in subsection 62-701.320(3), F.A.C. relating to solid waste management facilities in Florida. (62-701.710(2), F.A.C. and 62-701.320(7)(i), F.A.C.)
10. Provide documentation that the applicant either owns the property or has legal authorization from the property owner to use the site for a waste processing facility (62-701.710(2), F.A.C. and 62-701.320(7)(g), F.A.C.)

C. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER


1. Applicant:

The undersigned applicant or authorized representative of CEMEX Construction Materials Florida LLC

is aware that statements made in this form and attached information are an application for a FL Storage and

Processing Facility

Permit from the Florida Department of Environmental Protection and certifies that the information in this application is true, correct and complete to the best of his/her knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.



Signature of Applicant or Agent
Alberto Calleros

Name and Title (please type)
alberto.calleros@cemex.com

E-Mail address (if available)

10311 Cement Plant road.

Mailing Address
Brooksville, FL 34601

City, State, Zip Code
(352) 799-7881


Telephone Number
8/9/19

Date

Attach letter of authorization if agent is not a governmental official, owner, or corporate officer.

2. Professional Engineer registered in Florida (or Public Officer if authorized under Sections 403.707 and 403.7075, Florida Statutes):

This is to certify that the engineering features of this waste processing facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.



Signature
Maxwell R. Lee, Ph.D., P.E.

Name and Title (please type)

PO Box 5127

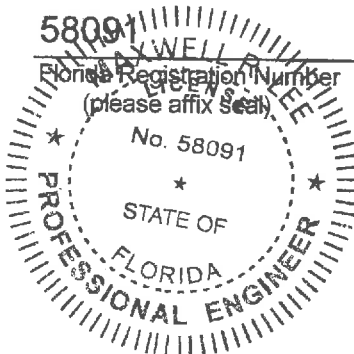
Mailing Address
Gainesville, FL 32627-5127

City, State, Zip Code
mlee@kooglerassociates.com

E-Mail address (if available)
(352) 377-5822

Telephone Number
8/8/18

Date



3.1 Description of Alternative Fuels/Materials (AFM)

Provide a description of the solid waste that is proposed to be collected, stored, processed or disposed of by the facility, a projection of those waste types and quantities expected in future years, and the assumptions used to make the projections (Rule 62-701.710(2)(a), F.A.C.).

The CEMEX Brooksville South Cement Plant has obtained FDEP permitting for air emissions to use the AFM at their facility beginning in early 2011 and for expanded operations in April 2012. No changes in air permitting have occurred since that time regarding the use of AFM. The current permit allows firing of a variety of AFM including tire-derived fuel; plastics; roofing materials; agricultural biogenic materials; untreated and treated cellulosic biomass; carpet-derived fuels; and engineered fuels (EF) in the Kiln No. 2 System.

The list of AFM includes:

- a) **Tire-Derived Fuel (TDF)**, which includes whole and shredded tires with or without steel belt material including portions of tires such as tirefluff. The kiln is currently permitted to use whole tires using the existing tire injection mechanism system. Note that up to 23 percent of tires contribute raw materials and 20 percent of tires are typically biogenic.²
- b) **Plastics**, which include materials such as polyethylene plastics used in agricultural and silviculture operations. This may include incidental amounts of chlorinated plastics. Note that chlorine above the range of 0.2 percent will cause damage to the kiln preventing use of chlorinated plastics.
- c) **Roofing Materials**, which consists of roofing shingles and related roofing materials with the bulk of the incombustible grit material separated and which is not subject to regulations as an asbestos-containing material per 40 CFR 61 subpart M.

² 40 CFR 98

- d) **Agricultural Biogenic Materials**, which includes materials such as peanut hulls, rice hulls, corn husks, citrus peels, cotton gin by-products, animal bedding and other similar types of materials.
- e) **Cellulosic Biomass - Untreated**, which includes materials such as untreated lumber, tree stumps, tree limbs, slash, bark, sawdust, sander dust, wood chips scraps, wood scraps, wood slabs, wood millings, wood shavings and processed pellets made from wood or other forest residues.
- f) **Cellulosic Biomass - Treated**, which includes preservative-treated wood that may contain treatments such as creosote, copper-chromium-arsenic (CCA), or alkaline copper quaternary (ACQ), painted wood, or resinated woods (plywood, particle board, medium density fiberboard, oriented strand board, laminated beams, finger-jointed trim and other sheet goods).
- g) **Carpet-Derived Fuel**, which includes shredded new, reject or used carpet materials.
- h) **Alternative Fuel Mix**, which includes a blended combination of two or more of any of the above materials.
- i) **Engineered Fuel (EF)** is engineered to have targeted, consistent fuel properties such as: calorific value, moisture, particle size, ash content, and volatility. The specific targeted properties are established based on available alternative fuel material supply and are carefully controlled through blending of non-hazardous combustible materials or through separation of non-hazardous incombustible materials from combustible materials (mixes of any alternative fuels where the blending and processing may also include the addition of on-specification used oils or other non-hazardous liquids to ensure consistent and predictable fuel properties). EF is engineered largely from the above materials and could consist of animal meal, automotive manufacturing by-products, clean-up debris from natural disasters, processed municipal solid waste, paint filter cake, hospital materials

(non-infectious), pharmaceuticals (expired prescriptions), cosmetics, and confiscated narcotics.

The Brooksville South Cement Plant stores AFM in four separate locations on-site and one location off-site on the Gregg Mine property. The current solid waste permit allows for the storage of 4900 tons on-site. The amount is being reduced to 4800 tons for the permit renewal. One location was originally permitted on-site as "outdoor trailer storage" having 100 tons of capacity for storage. That storage area is no longer in use.

These storage locations with fuel types and capacity tonnage are listed on the following table.

Table 1. AFM Storage Locations

Location* (storage tonnage)	Tire Derived Fuel	Plastics	Roofing Material	Agricultural Biogenic Materials	Cellulosic Biomass- Untreated	Cellulosic Biomass- Treated	Carpet- Derived	Alternative Fuel Mix**	Engineered Fuel
A-Frame Bldg. – Covered (1000 tons)	X	X	X	X	X	X	X	X	X
ASB Storage – Covered (1000 tons)	X	X	X	X	X	X	X	X	X
Alternative Fuel/Material Storage and Processing Slab (300 tons)	--	--	--	X	X	--	--	--	--
Coal Yard (2500 tons)	--	--	--	X	X	--	--	--	--
Total on-site Storage	4800 tons								
OFF-SITE (Gregg mine) Outdoor Trailers (400 tons)	X	X	X	X	X	X	X	X	X

* See Section 3.4 for location details

**If such AFM includes material not allowed to be stored outdoors, then the mix will not be stored outdoors.

These locations are mapped and further discussed in the following sections. The total storage capacity of the cement plant locations on-site is 4,800 tons. As such, the Brooksville South Cement Plant has a maximum of 4,800 tons of AFM on-site at any given time. AFM on the cement plant site is managed in accordance with 62-701 F.A.C.

The AMF enclosed trailer storage area for approximately 400 tons is located on the quarry property (Gregg Mine), which is separately regulated under the environmental resource permit (ERP) issued by the FDEP Mining and Minerals Regulation Department. AFM on the quarry is managed as permitted by the ERP and not through this permit. The approximate location of the AFM storage area on the quarry property is shown on Figure 1.

3.2 Site Plans

Attach a site plan, signed and sealed by a professional engineer registered under chapter 471, F.S. with a scale not greater than 200 feet to the inch, which shows the facility location, total acreage of the site, and any other relevant features such as water bodies or wetlands on or within 200 feet of the site, potable water wells on or within 200 feet of the site (Rule 62-701.710(2)(b) FAC.

Facility figures depicting the site location and other relevant features are provided in Appendix 1. The site plan, Figure 1, is provided on one figure at a scale of 1 inch = approx. 250 feet due to the large size of the facility. We are respectfully requesting an exemption from the requirement that the scale be not greater than 200 feet to the inch.

3.3 Description of Equipment

Provide a description of the operation and functions of all processing equipment that will be used, with design criteria and expected performance. The description shall show the flow of solid waste and associated operations in detail, and shall include (Rule 62-701.710(2)(c), F.A.C.):

- a. Regular facility operations as they are expected to occur;***
- b. Procedures for startup operations, and scheduled and unscheduled shut down operations; and***

c. Potential safety hazards and control methods, including fire detection and control.

AFM is used during normal operations and not used during scheduled and unscheduled startup and shutdown of the kiln system. Covered trucks unload AFM at the designated storage areas. When AFM are to be used in the pyroprocessing process, AFM is transported via front end loader or open top trailers to the feeder system.

The following photos depict the typical major component of an AFM handling/injection system, the feeder system. The feeder system typically includes a docking station for walking trailers or hopper to unload AFM that is then fed into a screw feeder. The AFM is conveyed, weighed and then injected pneumatically into the kiln. Startup of operations includes the use of the walking bed trailers to deliver AFM to the feeder system. In the case of an unscheduled shutdown of the feeder, delivery of the AFM to the feeder will cease and the trailers will be used to store the AFM until the issue has been resolved. See photos 1-5, representing a typical feeder delivery system.



Photo 1. A typical covered feeder system



Photo 2. Two offloading docks of typical feeder system

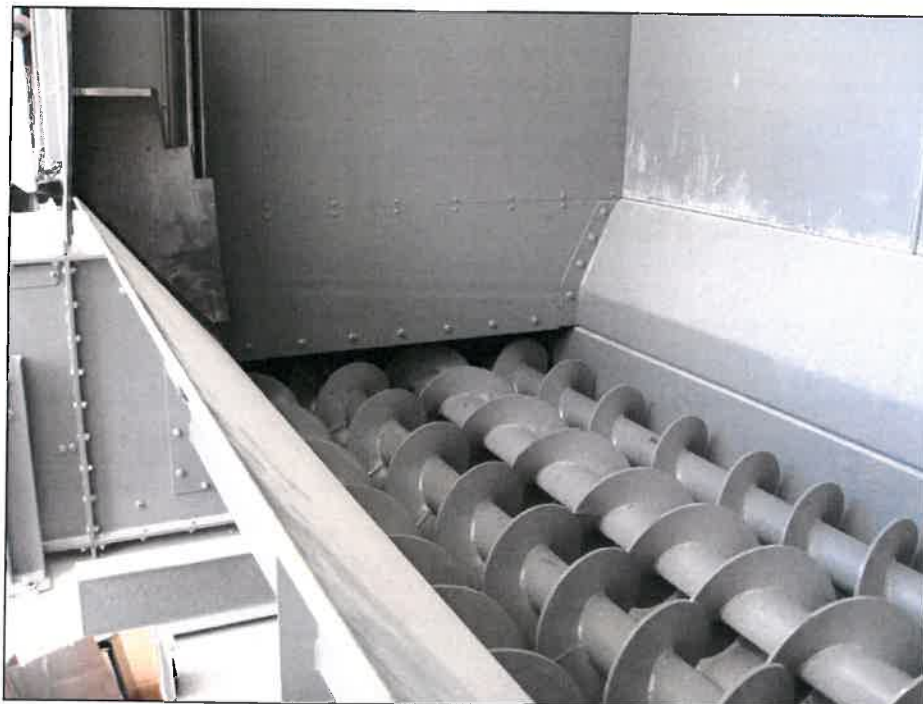


Photo 3. Typical screw conveyor in bottom of offloading ports



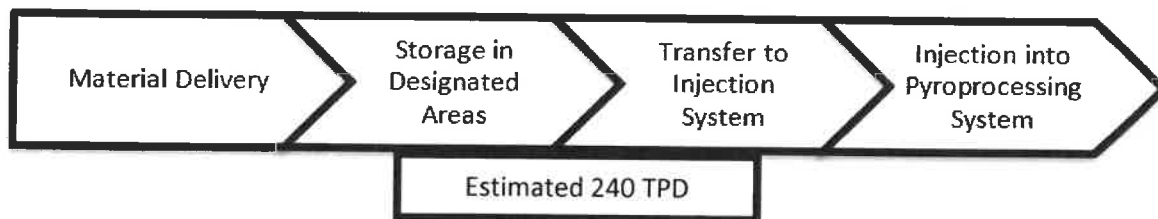
Photo 4. Typical Conveyors coming from offloading ports to metering system



Photo 5. Typical Pneumatic blower from metering system to injection porthole

CEMEX personnel working with the feeder system receive feeder training on proper operation of the system. This includes, but is not limited to, training on safety interlocks, location of all emergency stops, location of electrical disconnects and how to unplug AFM from the system. In addition, the operators have fire safety training as part of employee training.

The flow of alternative fuels from delivery to use is as follows:



3.4 Description of Loading, Unloading, Storage and Processing Areas

Provide a description of the loading, unloading, storage and processing areas (Rule 62-701.710(2)(d), F.A.C.).

The storage areas and drainage details for each of the planned AFM locations are identified and depicted on Figure 1 (Appendix 1). The facility has two designated covered storage areas and two designated outside storage areas for uncovered AFM totaling 4,800 tons. An additional outside trailer storage area is located off-site on the Gregg Mine property and holds approximately 20 trailers with a capacity of 20 tons each (400 tons). Note that a primary goal is to keep these AFM dry since water within the AFM directly reduces the value of the fuel. Engineered fuel is only stored under cover or in trailers (see Table 1 for details). The details for these on-site locations are as follows:

A-Frame Building (AFB) – 1,000 ton capacity - NE end of the building. The floor is an impervious surface which according to boring logs varies in composition of:

- between 6 inches and 1 foot 6 inches of compacted limestone, beneath which lies between 2 feet 6 inches to 4 feet 6 inches of clay; or
- over 4 feet of clay

Either hard rock or limestone was encountered at each boring at a depth of between 4 and 5 feet. Two permeability tests were performed at depths of 12 to 14 inches below the existing ground surface which resulted in the determination that the floor of the A-Frame Building is impervious. The report with boring logs and methodology of the soil sampling was provided as Appendix 2 of the original application in 2013.

There is a drainage ditch on the south side of the A-Frame building which directs run-off to a concrete lined collection basin. The basin then drains through an underground pipe to the perimeter ditch and is pumped (via a float controlled pump) to the stormwater pond across Cement Plant Road. The remaining ditches also discharge through culverts into the large perimeter ditch. See Figure 1 for the direction of drainage. This building is covered so no drainage from AFM should occur. To address the possibility of windblown rain coming into contact with AFM, the materials is not stored within approximately 6 feet from the edges of the building.

The ASB has a clay lined floor. The floor is compacted subgrade material overlain by 10 inches of compacted graded aggregate which is overlain by 12 inches of clay.

Drainage around this building is also directed to a drainage ditch which discharges into the large perimeter ditch. Water from the perimeter ditch is pumped (via a float controlled pump) from the perimeter ditch to the pond across Cement Plant Road. This building is covered so no drainage from AFM should occur. To address the possibility of windblown rain coming into contact with AFM, the materials is not stored within approximately 6 feet from the edges of the building.

Additive Storage Building (ASB) – 1,000 ton capacity – SW end of building. The ASB has a clay lined floor. The floor is compacted subgrade material overlain by 10 inches of compacted graded aggregate which is overlain by 12 inches of clay.

Drainage around this building is also directed to a drainage ditch which discharges into the large perimeter ditch. Water from the perimeter ditch is pumped (via a float controlled pump) from the

perimeter ditch to the pond across Cement Plant Road. This building is covered so no drainage from AFM should occur. To address the possibility of windblown rain coming into contact with AFM, the materials is not stored within approximately 6 feet from the edges of the building.

Alternative Fuel/Materials Storage and Processing Slab (AFM slab) - 300 tons.

Drainage is directed to the drainage ditch which outfalls to a clay-lined settling pond (See Figure 1, Appendix 1). AFM are temporarily placed in this location prior to injection into the alternative fuels feeding system. Agricultural biogenic material or untreated biomass will be stored and processed here. This area is covered/tented should other types of AFM require processing on the AFM slab.

Coal Yard – 2,500 tons. Drainage is directed to the settling pond to the north. Agricultural biogenic material or untreated biomass will be stored in this location. Coal pile runoff is directed to a separate settling pond to the north as shown on Figure 1.

3.5 Storage Capacity

Provide the identification and capacity of any on-site storage areas for recyclable materials, non-processable wastes, unauthorized wastes, and residues (Rule 62-701.710(2)(e), F.A.C.).

The above citation from the regulation is intended to address solid waste facilities and does not apply entirely to this AFM processing facility. CEMEX accepts a wide variety of AFM as described in previous sections, many of which are not defined as solid waste. However, for the purposes of this permitting process, CEMEX will manage all of the AFM in accordance with 62-701 F.A.C.

CEMEX intends on occasionally processing AFM on-site for screening and reducing sizing as needed at the AFM slab (inert, untreated biomass or agricultural by-products) or under cover in

the ASB location. Portable tents or other type of wind barriers are utilized at the AFM slab as necessary to prevent release of material to the air or water. After AFM is screened and/or reduced in size, the AFM is stored in one of the designated on-site locations or at the designated storage location within the quarry property. Processing is considered as a secondary process and will be utilized as needed for material handling purposes. For example, if a whole tire is not acceptable, then it can be shredded then fed into the kiln, instead of setting aside for shipment off-site. CEMEX makes every effort to ensure that unauthorized wastes are not brought on-site.

3.6 Plan for Disposal

Provide a plan for disposal of unmarketable recyclable materials and residue, and for waste handling capability in the event of breakdowns in the operations or equipment (Rule 62-701.710(2)(f), F.A.C.).

Not applicable.

3.7 Boundary Survey, Legal Description, and Topographic Survey

Provide a boundary survey, legal description, and topographic survey of the property (Rule 62-701.710(2)(g) FAC.

Boundary surveys with legal descriptions are on file with the Department for the CEMEX property.

A site plan (Figure 1) and topographic map (Figure 2) are provided in Appendix 1.

3.8 Design Requirements - Rule 72-701.710(3)

(a) Tipping, processing, sorting, storage and compaction areas that are in an enclosed building or covered area shall have ventilation systems. The areas that are not enclosed shall be equipped with litter control devices.

The identified storage areas have adequate ventilation being either outdoors or pole barns (see Figure 1, Appendix 1). The areas are maintained the same as conventional fuel storage areas with housekeeping measures implemented to maintain the product by sweeping and dust control as needed.

(b) The facility shall be designed with a leachate control system to prevent discharge of leachate and avoid mixing of leachate with stormwater, and to minimize the presence of standing water.

These AFMs typically have 5-50% moisture, with some fresh cut woods having up to 50% moisture. Given these are fuels that should be dry, CEMEX intends to minimize outdoor storage of AFMs, and outdoor storage are only used for clean materials as listed in Table 1. CEMEX is currently permitted to store up to 55,000 tons of coal outside which contains similar constituents to AFMs.

Engineered Fuels (EFs) are expected in the next few years to comprise approximately 30 percent of the AFMs to be utilized at the facility, and they are kept undercover. EFs are generally dry materials, with less than 10% moisture.

When confiscated AFMs (e.g., illegal drugs) are brought on-site, they are escorted directly to the kiln and are not stored on site.

To reduce the possibility of windblown rain from coming into contact with any AFMs stored undercover, they are staged no closer than 6 feet from the edges of the building. Additionally, two sides of the ASB building are enclosed with a 10 foot wall, and the building is partitioned lengthwise by a 12 foot interior wall which assist with keeping the AFMs separated.

(c) Provisions shall be made for evaluating the quantity of all incoming solid waste and recovered materials. Storage areas shall be designed to hold the expected volume of materials until they are transferred for disposal or recycling.

The receipt of AFM is monitored as described in Sections 3.6 and 3.9. The storage areas have already been constructed and are designed to hold the expected volume of AFM until transferred for use in the kiln. All incoming AFM are weighed and the weights documented. Records of each

shipment are stored for at least three years. See Sections 3.4, 3.5, and 3.6 for additional details on the handling and storage of AFM.

3.9 Operation Plan

Provide an operation plan which describes how the applicant will comply with Rule 62-701.710(4), F.A.C. (Rule 62-701.710(2)(h), F.A.C.).

3.9.1 Receiving

The air permitting requires AFM to be received at the facility in covered trucks and/or in enclosed containers. During unloading and handling of AFM, the facility uses precautions as necessary to prevent fugitive dust emissions. AFM is transported within the facility by open top trailers and stored in accordance with applicable regulations. Most AFM such as processed carpet, plastic, and paper are normally delivered in large bales – which can require minimal processing, but other AFM such as processed roofing shingles, peanut hulls, engineered fuels, sawdust and wood shavings normally come in unbaled or loose. AFM is inspected by the provider prior to shipment. If unacceptable material is found, it is removed. Access to the facility is regulated by a manned guard gate at all times.

3.9.2 Preparation

As mentioned in Section 3.5, depending on the AFM, the AFM may periodically be additionally sized (i.e., grinded) and may also be screened to ensure uniform particle size as well as removal of unwanted materials, and/or passed through a belt magnet for additional metal removal. A primary requirement of the quality of the AFM is minimal moisture content, thereby limiting the potential of wet material to the maximum extent possible. Such periodic processing and storage is conducted either under cover in the ASB building (for all AFM) and on the AFM slab (for inert, untreated biomass or agricultural by-products). After processing is complete, mechanically transported AFM is moved by mobile equipment (front loader, truck and trailer, etc.) to designated storage locations (see Table 1) or to a hopper system which feeds the AFM into the

pyroprocessing system (kiln). Dust suppression in storage areas is used as needed. The facility stores AFM under cover and on a concrete or compacted clay surface with run-off control.

3.9.3 Transport, Handling, and Storage

The transport of AFM in the site is in opened top trailers or by front end loader, with dust suppression as needed to control fugitive dust. Trucks delivering AFM to the site is covered trucks and enter through the front gate and deposit the AFM at one of the four specified locations (See Figure 1, Appendix 1).

3.9.4 Personnel

The responsible person(s) for individual portions of operation.

Plant Manager: Alberto Calleros
 Environmental Manager: Brent Steele

3.9.5 Equipment

See Section 3.3 of this document.

3.9.6 Best Management Practices (BMP) Plan

Table 2. Best Management Practices Plan	
Practice	Description
Minimization of Fugitive Dust	<ol style="list-style-type: none"> 1) Drop points to storage areas shall be designed to minimize the overall exposed (or exposed to the atmosphere) drop height for AFM that have the potential to create airborne dust particles. 2) Periodic maintenance shall be performed to maintain off-loading locations and associated drop point integrity as necessary.
Minimization of AFM in Contact with Stormwater	<ol style="list-style-type: none"> 1) AFM is processed and stored under cover or in enclosed conditions. It is a primary goal of the facility to keep the AFM dry per category (e.g. agricultural biogenic material and untreated biomass will be stored outdoors, not under cover).
Fire Prevention/ Spontaneous Combustion Minimization	<ol style="list-style-type: none"> 1) The Emergency Response Plan includes: <ol style="list-style-type: none"> a. Facility maintains a separate Fire Prevention and Safety Plan on-site. b. The local Fire Department performs an annual inspection of the facility.

	<p>c. All buildings and mobile equipment are equipped with firefighting equipment as required by all county, state, and federal codes and regulations.</p> <p>2) Proper storage of AFM to ensure that heat generated from pile compaction does not result in spontaneous combustion.</p> <p>3) All fuel areas must display appropriate signage (fire hazard warnings, no smoking, etc.) to notify personnel and visitors of any potential fire hazards to prevent accidental combustion of AFM.</p>
Quality Assurance	<p>1) The AFM shall be delivered to the Plant with all loads properly secured, contained, and covered.</p> <p>2) For each shipment of AFM, the permittee shall record the date, quantity and a description of the AFM received and keeps a record of the Bill of Lading for a minimum of two years.</p> <p>3) The permittee shall inspect and sample shipments of AFM to ensure that delivered AFM meet the respective expected selection criteria. If the permittee identifies off-specification material, the supplier shall be contacted and the AFM shall be returned, disposed, blended, or any other appropriate legal method of handling the AFM shall be employed.</p> <p>4) The permittee shall maintain records of off-specification deliveries and actions taken to correct such abnormalities. Such records shall be stored on-site for at least two years and available for inspection upon request.</p>
Maintenance	The floors of the alternative fuel storage areas of the A-Frame and the ASB buildings is inspected regularly and repaired as depression occurs from front-end loader traffic. Clay can be used for the repairs and compacted.
Safety	CEMEX maintains a separate Safety Plan on-site.

3.9.7 Contingency Plan

The facility maintains a separate Contingency Plan (Plan). This Plan addresses a broad range of contingencies that are described in 62-701.320.(16) including fires, explosions, and natural disasters. The Contingency Plan is provided with this permit renewal as a separate document. (Contingency Plan/Emergency Procedures, December 2012, updated August 2018).

3.9.8 Operators and Spotters

Not applicable to the processing and storage of AFM. AFM comes to the facility as a sorted and sized commodity. Therefore, the requirement of regulated spotter and operator training per 62-701.320(15), F.A.C. should not be required.

3.9.9 Objectionable Odors

The facility will be operated such that objectionable odors are addressed in accordance with subsection 62-296.320(2), F.A.C. The facility does not allow the discharge of air pollutants which cause or contribute to an objectionable odor beyond the facility boundary.

3.9.10 Fire Protection

The facility has adequate fire protection available at all times.

3.9.11 Access

Access to the facility is controlled through the use of plant personnel on-site 24 hours per day, 7 days per week, by the use of surveillance cameras, fences, and natural barriers. All vehicles are logged in and out.

3.9.12 Regulated Hazardous Wastes

If regulated hazardous wastes are discovered to have been improperly deposited at the facility, the facility operator will promptly notify the Department, the person responsible for shipping the wastes to the facility, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator shall assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility.

3.10 Closure Plan

The Closure Plan is maintained as a separate document and was updated for this permit renewal application in August 2018. A copy of the approved plan will be kept on file at the Facility.

3.11 Stormwater Control

Provide documentation to show that stormwater will be controlled according to the requirements of Rule 62-701.710(8), F.A.C.

The facility was not required to obtain an Environmental Resource permit and has a letter from the Environmental Protection Agency stating that a National Pollutant Discharge Elimination

System (NPDES) permit is not required. The facility has a closed drainage system. Run-off from the facility is directed to various ditches and settling ponds. In the event of a storm event causing the ponds on the south side of Cement Plant Road to overflow, two emergency spillways would direct flow to the adjacent property owned by CEMEX. Based on the proposed storage, at no time would there be a discharge of stormwater to waters of the United States and no ditch connects to off-site surface waters. CEMEX conducts quarterly monitoring of the perimeter ditch and one of the receiving ponds (shown in Figure 1, Appendix 1).

All of the proposed storage areas are designated as Flood Zone X (not within a flood zone).

3.12 Recordkeeping Requirements

Provide documentation to show that the applicant will comply with the recordkeeping requirements of Rule 62-701.710(9), F.A.C.

CEMEX retains operational records to include a daily log of the quantity and type of AFM received, the quantity transferred to the kiln for energy recovery, and the quantity shipped off-site. These records include each type of AFM which is processed, recycled, and/or disposed. The records is compiled on a monthly basis and made available for inspection by the Department. The facility retains the records for a minimum of three years.

3.13 Enforcement Actions

Provide a history and description of any enforcement actions by the applicant described in subsection 62-701.320(3), F.A.C. relating to solid waste management facilities in Florida. (Rules 62-701.710(2), F.A.C. and 62-701.320(7)(i), F.A.C.)

The facility has not had any enforcement actions relating to solid waste management facilities in Florida.

A. Figures

Figure 1 – Site Plan Aerial

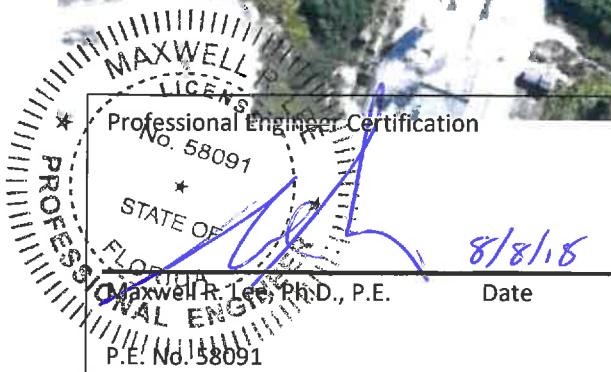
Figure 2 – Topographic Map

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LEGEND			
	Approx. 500 foot boundary from storage and processing areas		AFM Storage/ Processing Slab, Outside (300 tons)
	Drainage Ditch		Coal Yard Storage (2,500 tons)
	ASB Storage area (1,000 tons, covered)		Approx. location of wells (FDEP)
	A-frame Storage (1,000 tons covered)	<i>No jurisdictional wetlands within 200 feet of storage and processing areas</i>	
	Off-site (Gregg Mine) Outside Trailer Storage (up to 400 tons)		



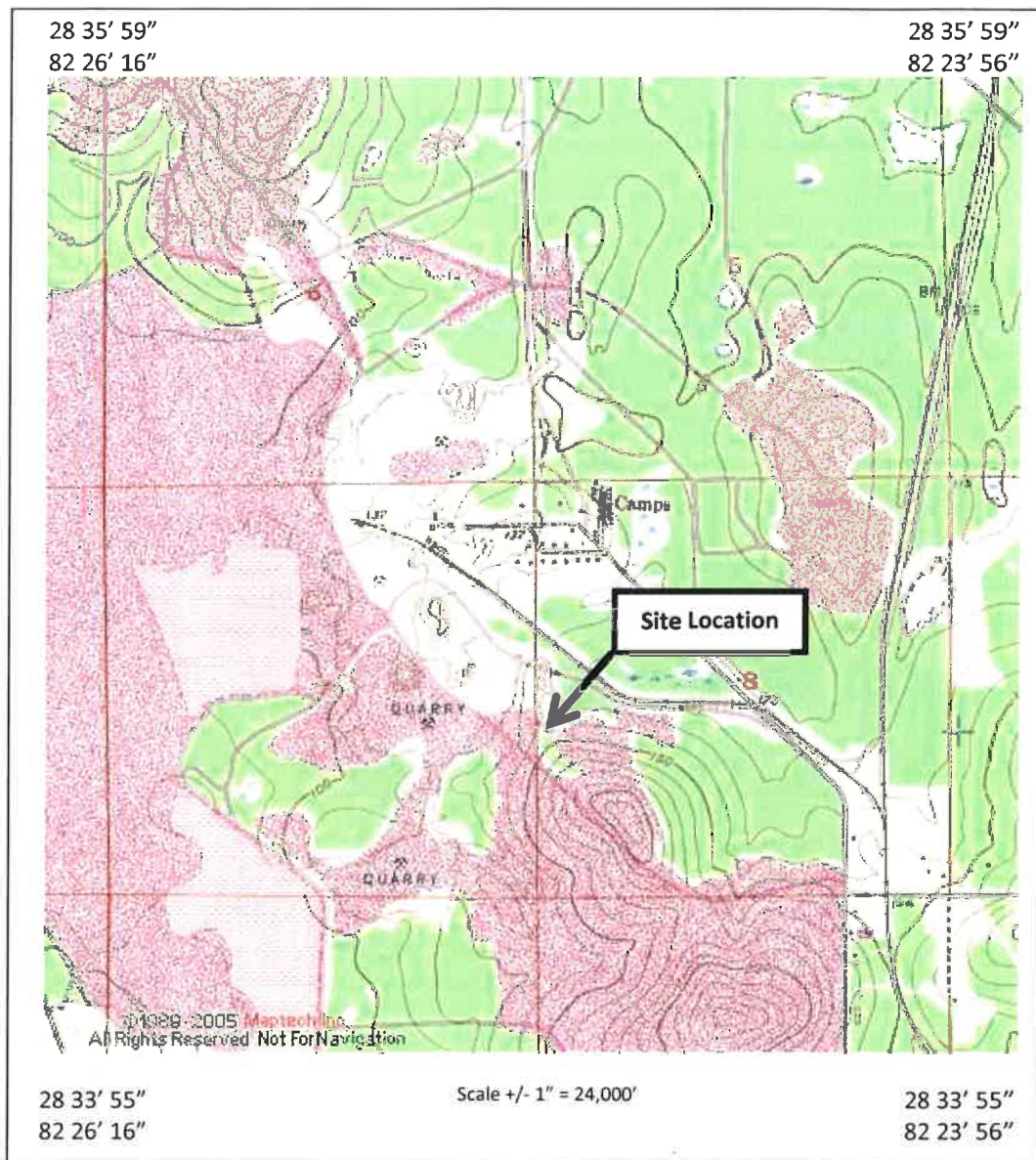
Scale 1"= +/- 250'

Aerial Image from Google Earth
Image Date 03-24-2016


Drawing No. 307-18-07

Figure 1 - Site Plan
AFM Storage/Processing Locations
CEMEX Brooksville South-Alternative Fuel Material
Permit Renewal Application, 62-701.900(4), FAC
Brooksville, Hernando County, FL





USGS map web address: <http://mapserver.mytopo.com/homepage/index.cfm> (last visited October 31, 2012)

<p>Professional Engineer Certification</p> <p>MAXWELL R. LEE</p> <p>No. 58091</p> <p>Maxwell R. Lee, Ph.D., P.E.</p> <p>P.E. No. 58091</p> <p>STATE OF FLORIDA</p> <p>PROFESSIONAL ENGINEER</p> <p>Date: 8/7/18</p>	<p>FIGURE 2</p> <p>USGS Topographic Map</p> <p>CEMEX Brooksville South</p> <p>Alternative Fuel Material</p> <p>Permit Renewal Application, 62-701, FAC</p> <p>Brooksville, Hernando County, FL</p>	 <p>KOOGLER & ASSOCIATES</p> <p>ENVIRONMENTAL SERVICES</p> <p>4014 NW THIRTEENTH STREET</p> <p>GAINESVILLE, FLORIDA 32609</p> <p>352/377-5822 • FAX 377-7158</p>
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CLOSURE PLAN

CEMEX Construction Materials Florida, LLC
Brooksville South Cement Plant
Brooksville, Hernando County, Florida

FDEP Alternative Fuel/Material Processing Facility
Renewal of Permit No. 22787-0040SO/31
WACS No. 40778

Plan Date: December 2012
Updated: August 2018

Consultant:

Maxwell R. Lee, Ph.D., P.E.
Tammy Garcia – Environmental Scientist
Koogler and Associates, Inc.
www.kooglerassociates.com
P.O. Box 5127
Gainesville, Florida 32627-5127
(352) 377-5822

Closure Plan

1.0 Notification and Closing Process

Prior to ceasing operations, notification will be provided to the Department and contracted waste suppliers and generators of the intent to close and the expected time frame. Access to the facility is controlled through the use of plant personnel on-site 24 hours per day, 7 days per week, by the use of surveillance cameras, fences, and natural barriers. All vehicles are logged in and out. When the facility is no longer going to function as an AFM processing facility, the plant personnel will deny access of AFM to the facility. A notice will be posted at the entrance to the property stating that the facility is closed.

Prior to closing the facility, any remaining AFM from the storage areas will be combusted in the cement kilns or removed from the facility by a permitted hauler and management facility or returned to the supplier(s).

2.0 Quantity of Alternative Fuel Material (AFM)

The maximum quantity of AFM to be stored on-site at the facility is 4,800 tons. There is no disposal of ash from the combustion of AFM in the cement manufacturing process. Maximum AFM usage for the Kiln 2 system is estimated at 240 tons/day, with an average expected usage of 150 tons/day. The expected average inventory turnaround is therefore approximately 32 day's supply based on 4,800 tons per day of storage and 150 tons per day usage. For the CEMEX Brooksville South Cement Plant facility, that amount is as follows:

$$150 \text{ tons/day} \times 32 \text{ days} = \underline{4,800 \text{ tons of AFM}}$$

At a higher usage rate, the AFM storage would be for a shorter period of time.

3.0 Closure Scheduling

At the time a decision is made to close the facility, it is estimated that the total time necessary for closure will be as follows:

Notification Period – 60 days

The Notification Period is expected to be 60 days to allow time for collectors to revise their routing and notify the facilities to receive the AFM.

Combust All AFM At Facility – 60 days

After the 60-day Notification Period ends, the facility will be closed to incoming AFM. As the facility will be managed to ensure that approximately less than 30 times the daily capacity of the equipment is stored, approximately 30 days of normal operations are necessary to combust all AFM. To cover any unforeseen circumstances (i.e., down time), this phase of closure is estimated to be 60 days.

Removal of Residues - 30 Days

Although significant quantities are not expected, any residues at the facility will be removed to a permitted facility or receiver.

Restore Facility to its Pre-Permit Condition

If facility rehabilitation in accordance with 62-711.700(3)(c) is deemed necessary by the Department, CEMEX will work with the Department to develop and implement a plan for action. Part of the plan development will address adequate time for completion. Without a scope of work, the time frame to complete this task is unknown.

Department Notification

CEMEX will notify the Department when the closing of the facility is complete. CEMEX understands that the Department will inspect the site to ensure that all closing procedures have been correctly implemented and completed. Upon Department inspection and approval of the facility closing, the Department shall provide CEMEX approval of the closing in writing. It is further understood that the Department Secretary or his designee shall release the financial instrument within 30 days of closing approval.

4.0 Closure Cost Estimates

The estimated closing costs for the facility are based on current third party estimates. The third parties are not subsidiaries or parent companies and their estimates are based on performing the work and are reported on a per unit basis. Closing costs include removal and disposal of AFM, manual labor for facility cleanup, facility re-grading (if necessary), and inspection by a Professional Engineer registered in the state of Florida. The cost estimates are certified by a Professional Engineer. The cost estimate is re-estimated at least annually and submitted to the Department at least 60 days prior to the anniversary date of the instrument.

To demonstrate financial assurance of the facility closing costs, CEMEX will obtain a guarantee bond that meets or exceeds the required amount of money for the closure costs.

The actual estimated cost of closing the facility at the time of development of this Closure Plan is \$272,998, plus the 10 percent contingency estimate of \$27,299.80 for a total of \$300,297.80. The closing estimates are provided as Attachments.

Removal/Disposal of AFM

The closing cost estimate for this task is based on the quantity of AFM that is permitted for the facility at the amount that would be expended to remove, process, and dispose of AFM at the facility and to close the related operations at the facility. The estimate was obtained from Creative Environmental Solutions, Inc. (CES) and is provided as Attachment A. The estimate was obtained on a per ton basis up to a maximum quantity of 4,900 tons as per the current permit (however, this application is being submitted for 4800 tons). Therefore, a cost estimate for the transport and disposal at a Class I waste facility of 4,900 tons of AFM based on the CES estimate is as follows:

- 4,900 tons @ approximately \$55 ton = \$269,500

Professional Engineer Services

This cost estimate is for an inspection by a professional engineer registered in Florida. A professional engineer will visit the facility to determine if there are spills or any AFM remaining after the removal of residues. The engineer will provide an inspection report detailing the findings and if applicable, will direct the cleanup effort. The closure cost estimate includes the cost for the inspection and reporting (see Attachment B). The estimate for professional engineering services is as follows:

- Site Inspection and Reporting - 8 hours at \$225/hour = \$1,800.00

Manual Labor

The cost of manual cleaning and debris removal is based on the United States Bureau of Labor Statistics for Occupational Employment and Wages, Florida, May 2017 for Cleaners

of Vehicles and Equipment.¹ The cost of rough grading was also obtained from United States Bureau of Labor Statistics for Occupational Employment and Wages, Florida, May 2017, Mining Equipment Operators². The cost for a backhoe (10') was obtained on-line from Discount Rentals in Tampa³. The costs for manual labor for facility clean-up and re-grading (if necessary) are estimated as follows:

- Cleanup - \$11.59/man hour x 80 hrs. = \$928.
- Equipment Operator (grading) \$23.75 hr. day (\$380) and Backhoe \$195/day for two 8 hour days (\$380 + \$390) = \$770.

5.0 Summary of Closure Plan

CEMEX has developed this Closure Plan in accordance with Rule 62-701.320(10)(b) (F.A.C.). Closing cost estimates were obtained from independent third parties, and appropriate proof of financial responsibility will be provided upon the Department's approval of this closure plan and closure cost estimates. The total current estimated cost of closing the facility including a contingency fee is \$300,297.80. A Financial Assurance Cost Estimate Form is provided as Attachment C.

6.0 Financial Assurance

Unless exempted by Rule 62-701.710(10)(a) FAC, provide the financial assurance documentation required by Rule 62-701.710(7) FAC (Rule 62-701-710(2)(j) FAC).

CEMEX has the required financial assurance in place in the amount of \$350,000.

¹ US DEPARTMENT OF LABOR, OCCUPATIONAL EMPLOYMENT STATISTICS, *Occupational Employment and Wages, May 2017*, https://www.bls.gov/oes/current/oes_fl.htm#53-0000

² US DEPARTMENT OF LABOR, OCCUPATIONAL EMPLOYMENT STATISTICS, *Occupational Employment and Wages, May 2017, Florida, Nonmetallic Mineral Mining and Quarrying, Mining Machine Operators*, <https://www.bls.gov/oes/current/oes475049.htm>.

³Discount Equipment, *Backhoe Rental 10' dig depth*, <http://www.discount-equipment.com/category/4002-excavator-and-loaderbackhoe-rental/>

- A. AFM Removal Cost Estimate**
- B. Professional Engineering Estimate**
- C. Financial Assurance Cost Estimate
Form**

ATTACHMENTS

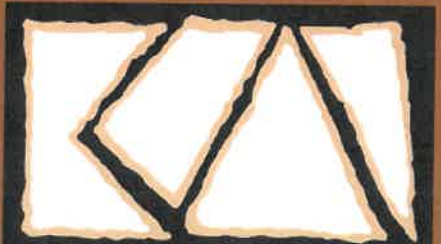


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ESTIMATE



KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES



Geologists ► Engineers ► Environmental Scientists

700 DeSoto Avenue • Brooksville, FL • 34601

July 31, 2018

Brent Steele
Environmental Manager – Brooksville South
10311 Cement Plant Road
Brooksville, FL 34601

Re: Cost Proposal for Alternative Fuels Transport and Disposal
Brooksville Cement Plant, Hernando County
FDEP Facility WACS ID SWD-27-40778

Dear Brent:

Creative Environmental Solutions, Inc. (CES) is pleased to submit this letter agreement to provide professional services for the project identified above.

Scope of Services:

We will transport and dispose of up to 4900 tons of alternative fuel material (AFM) from the Brooksville South Cement Plant Alternative Fuel Storage Areas. The AFM may be a combination of the materials listed in your Florida Department of Environmental Protection Solid Waste Permit. The materials will be transported in trucks and disposed at a licensed solid waste disposal facility. The scope assumes the materials will be non-hazardous and will have the same or similar chemical and physical properties reflected in the test reports provided.

Fees:

CES will provide the services described above for the following prices:

C& D and Natural Wood Materials

Transport:	\$30/ton
Disposal:	\$25/ton
Total Cost:	\$55/ton

These prices are subject to change after one year. Should you have any questions, please call me. Thank you for the opportunity to be of service.

Sincerely,

A handwritten signature in black ink, appearing to read 'George K. Foster'.

George K. Foster, P.G.
President

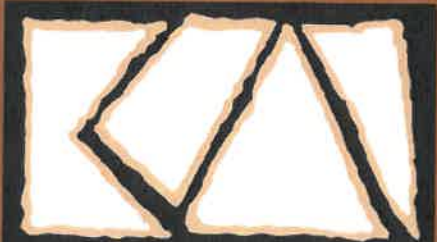
Tel: 352.796.3374 • Fax: 352.796.2449
info@creativeenvironmental.com

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KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES



307-18-07
August 6, 2018

4014 NORTH WEST 13th STREET
GAINESVILLE, FL 32609-1923
www.kooglerassociates.com
352.377.5822

Alberto Calleros
CEMEX Construction Materials Florida, LLC
PO Box 1508
Brooksville, FL 34605-1508

Re: Closing Cost Estimate - Professional Engineering Services
CEMEX Brooksville South Cement Plant AFM Facility
Brooksville, Hernando County, Florida

Dear Alberto:

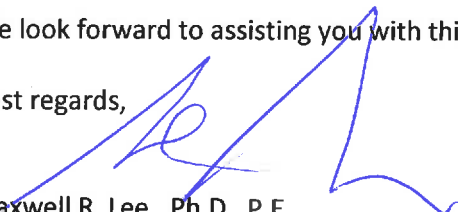
Thank you for the opportunity to present this cost estimate for Professional Engineering services for the Brooksville South Cement Plant, Alternative Fuel/Material Facility.

A Professional Engineer (P.E.), registered in Florida, will visit the Facility to conduct a site inspection to determine if there are any spills of any solid wastes or other clean-up activities necessary to meet the closure requirements as described in the Closure Plan and in accordance with Rule 62-701.600 (F.A.C.). The engineer will provide an inspection report detailing the findings and directing clean-up efforts if necessary. The professional engineer's inspection will also include a visual evaluation of the Facility elevations. The inspection report will detail these findings, and will provide direction of re-grading if necessary. The costs for Professional Engineering services as described above are as follows:

Site Inspection by P.E., 4 hours at \$225.00/hr. =	\$ 900.00
Report of findings and direction clean-up and re-grading as necessary, 4 hours at \$225.00/hr.=	\$ 900.00
TOTAL	\$1,800.00

We look forward to assisting you with this project in the future.

Best regards,


Maxwell R. Lee, Ph.D., P.E.
President, Koogler and Associates, Inc.

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COST
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FORM



KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: CEMEX Brooksville South Cement Plant WACS ID: SWD-27-40778
 Permit Application or Consent Order No.: 22787-004-SO/31 Expiration Date: 10/7/2018
 Facility Address: 10311 Cement Plant Road
 Permittee or Owner/Operator: CEMEX Construction Materials Florida, LLC
 Mailing Address: 10311 Cement Plant Road, Brooksville, FL 34601

Latitude: 28 ° 34 ' 54 " Longitude: 82 ° 25 ' "
 Coordinate Method: Degrees/Min/Sec Datum: NAD83 (Assumed)
 Collected by: Unknown/from original form Company/Affiliation: N/A

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Total disposal unit acreage included in this estimate: Closure: N/A Long-Term Care: N/A

Facility type: ☐ Class I ☐ Class III ☐ C&D Debris Disposal
 (Check all that apply) ☐ Other: N/A

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☐ Insurance Certificate ☐ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☒ Guarantee Bond* ☐ Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-6794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky.
Temple Terrace, FL 33637
813-632-7600

South District
2285 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-881-8600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☐ (a) Inflation Factor Adjustment

☒ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the Department approved closing cost estimate dated: _____

Latest Department Approved
Closing Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Closing
Cost Estimate:

x

=

This adjustment is based on the Department approved long-term care cost estimate dated: _____

Latest Department Approved
Annual Long-Term Care
Cost Estimate:

Current Year Inflation
Factor, e.g. 1.02

Inflation Adjusted Annual
Long-Term Care Cost
Estimate:

x

=

Number of Years of Long Term Care Remaining:

x

Inflation Adjusted Long-Term Care Cost Estimate:

=

Signature by: ☐ Owner/Operator

☒ Engineer

(check what applies)

Signature

PO Box 5127

Address

Maxwell R. Lee, Ph.D., P.E.

Name & Title

Gainesville, FL 32627-5217

City, State, Zip Code

August 7, 2018

Date

mlee@kooglerassociates.com

E-Mail Address

352-377-5822

Telephone Number

IV. ESTIMATED CLOSING COST (check what applies)☒ **Recalculated Cost Estimate**☐ **New Facility Cost Estimate**

- Notes: 1. Cost estimates for the time period when the extent and manner of landfill operation makes closing most exp
2. Cost estimate must be certified by a professional engineer.
3. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.
4. In some cases, a price quote in support of individual item estimates may be required.

Description	Unit	Number of Units	Cost / Unit	Total Cost
1. Proposed Monitoring Wells (Do not include wells already in existence.)				
	EA			
			Subtotal Proposed Monitoring Wells:	
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY			
Placement and Spreading	CY			
Compaction	CY			
Off-Site Material	CY			
Delivery	CY			
			Subtotal Slope and Fill:	
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY			
Synthetics - 40 mil	SY			
Synthetics - GCL	SY			
Synthetics - Geonet	SY			
Synthetics - Other (explain)				
			Subtotal Cover Material:	
4. Top Soil Cover:				
Off-Site Material	CY			
Delivery	CY			
Spread	CY			
			Subtotal Top Soil Cover:	
5. Vegetative Layer				
Sodding	SY			
Hydroseeding	AC			
Fertilizer	AC			
Mulch	AC			
Other (explain)				
			Subtotal Vegetative Layer:	
6. Stormwater Control System:				
Earthwork	CY			
Grading	SY	1	770	770
Piping	LF			
Ditches	LF			
Berms	LF			
Control Structures	EA			
Other (explain)				
			Subtotal Stormwater Control System:	770

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	_____	_____	_____
Pipe and Fittings	LF	_____	_____	_____
Monitoring Probes	EA	_____	_____	_____
NSPS/Title V requirements	LS	1	_____	_____
Subtotal Passive Gas Control:				_____
8. Active Gas Extraction Control:				
Traps	EA	_____	_____	_____
Sumps	EA	_____	_____	_____
Flare Assembly	EA	_____	_____	_____
Flame Arrestor	EA	_____	_____	_____
Mist Eliminator	EA	_____	_____	_____
Flow Meter	EA	_____	_____	_____
Blowers	EA	_____	_____	_____
Collection System	LF	_____	_____	_____
Other (explain) Disposal and	_____	1	269,500	269,500
Hauling of AFM (CES estimate)	_____	Subtotal Active Gas Extraction Control:		
9. Security System:				
Fencing	LF	_____	_____	_____
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____
Subtotal Security System:				_____
10. Engineering:				
Closure Plan Report	LS	1	_____	_____
Certified Engineering Drawings	LS	1	_____	_____
NSPS/Title V Air Permit	LS	1	_____	_____
Final Survey	LS	1	_____	_____
Certification of Closure	LS	1	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Engineering:				_____

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor	4	225	4	225	1,800
On-Site Engineer	_____	_____	_____	_____	_____
Office Engineer	_____	_____	_____	_____	_____
On-Site Technician	_____	_____	_____	_____	_____
Other (explain)	80	11.59	_____	_____	928
Clean Up Tech	_____	_____	_____	_____	_____

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	_____	_____
Subtotal Professional Services:				2,728

Subtotal of 1-11 Above: 272,998

12. Contingency 10 % of Subtotal of 1-11 Above 27,299.8

Subtotal Contingency:

Estimated Closing Cost Subtotal: 300,297.8

Description	Total Cost
13. Site Specific Costs	
Mobilization	<u> </u>
Waste Tire Facility	<u> </u>
Materials Recovery Facility	<u> </u>
Special Wastes	<u> </u>
Leachate Management System Modification	<u> </u>
Other (explain) <u> </u>	<u> </u>
<u> </u>	<u> </u>
	Subtotal Site Specific Costs: <u> </u>

TOTAL ESTIMATED CLOSING COSTS (\$): 300,297.80

V. ANNUAL COST FOR LONG-TERM CARE

See 62-701.600(1)a.1., 62-701.620(1), 62-701.630(3)a. and 62-701.730(11)b. F.A.C. for required term length. For landfills certified closed and Department accepted, enter the remaining long-term care length as "Other" and provide years remaining.
(Check Term Length) ☐ 5 Years ☐ 20 Years ☐ 30 Years ☐ Other, ____ Years

Notes: 1. Cost estimates must be certified by a professional engineer.

2. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

3. In some cases, a price quote in support of individual item estimates may be required.

All items must be addressed. Attach a detailed explanation for all entries left blank.

Description	Sampling Frequency (Events / Year)	Number of Wells	(Cost / Well) / Event	Annual Cost
1. Groundwater Monitoring [62-701.510(6), and (8)(a)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Groundwater Monitoring:				_____
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Surface Water Monitoring:				_____
3. Gas Monitoring [62-701.400(10)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Gas Monitoring:				_____
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)c]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Leachate Monitoring:				_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LF	_____	_____	_____
Sumps, Traps	EA	_____	_____	_____
Lift Stations	EA	_____	_____	_____
Cleaning	LS	1	_____	_____
Tanks	EA	_____	_____	_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY	_____	_____	_____
Sludge Removal	CY	_____	_____	_____
<u>Aeration Systems</u>				
Floating Aerators	EA	_____	_____	_____
Spray Aerators	EA	_____	_____	_____
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1000 gallon	_____	_____	_____
Subtotal Leachate Collection / Treatment Systems Maintenance:				_____
6. Groundwater Monitoring Well Maintenance				
Monitoring Wells	LF	_____	_____	_____
Replacement	EA	_____	_____	_____
Abandonment	EA	_____	_____	_____
Subtotal Groundwater Monitoring Well Maintenance:				_____
7. Gas System Maintenance				
Piping, Vents	LF	_____	_____	_____
Blowers	EA	_____	_____	_____
Flaring Units	EA	_____	_____	_____
Meters, Valves	EA	_____	_____	_____
Compressors	EA	_____	_____	_____
Flame Arrestors	EA	_____	_____	_____
Operation	LS	<u>1</u>	_____	_____
Subtotal Gas System Maintenance:				_____
8. Landscape Maintenance				
Mowing	AC	_____	_____	_____
Fertilizer	AC	_____	_____	_____
Subtotal Landscape Maintenance:				_____
9. Erosion Control and Cover Maintenance				
Sodding	SY	_____	_____	_____
Regrading	AC	_____	_____	_____
Liner Repair	SY	_____	_____	_____
Clay	CY	_____	_____	_____
Subtotal Erosion Control and Cover Maintenance:				_____
10. Storm Water Management System Maintenance				
Conveyance Maintenance	LS	<u>1</u>	_____	_____
Subtotal Storm Water Management System Maintenance:				_____
11. Security System Maintenance				
Fences	L6	<u>1</u>	_____	_____
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____
Subtotal Security System Maintenance:				_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	1		
Subtotal Utilities:				

13. Leachate Collection/Treatment Systems Operation

Operation

P.E. Supervisor	HR			
On-Site Engineer	HR			
Office Engineer	HR			
OnSite Technician	HR			
Materials	LS	1		

Subtotal Leachate Collection/Treatment Systems Operation: _____

14. Administrative

P.E. Supervisor	HR			
On-Site Engineer	HR			
Office Engineer	HR			
OnSite Technician	HR			
Other _____				

Subtotal Administrative: _____

Subtotal of 1-14 Above: _____

15. Contingency	_____	% of Subtotal of 1-14 Above		
Subtotal Contingency:				

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Subtotal Site Specific Costs:				

ANNUAL LONG-TERM CARE COST (\$ / YEAR): _____

Number of Years of Long-Term Care: _____

TOTAL LONG-TERM CARE COST (\$): _____

VI. CERTIFICATION BY ENGINEER

This is to certify that the Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and/or long-term care of the facility and comply with the requirements of Rule 62-701.630 F.A.C. and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Cost Estimates shall be submitted to the Department annually, revised or adjusted as required by Rule 62-701.630(4), F.A.C.



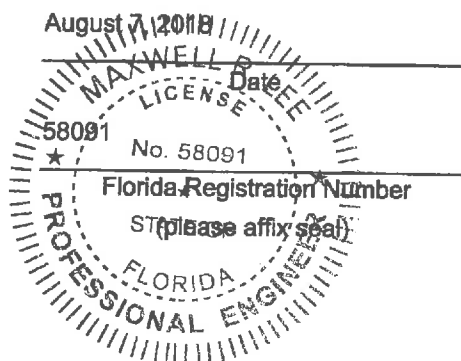
Signature

Maxwell R. Lee, Ph.D., P.E.

Name and Title (please type)

August 7, 2018

Date



Florida Registration Number

(please affix seal)

PO Box 5127

Mailing Address

Gainesville, FL 32627-5217

City, State, Zip Code

mlee@kooglerassociates.com

E-Mail address (if available)

352-377-5822

Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR



Signature of Applicant

Alberto Calleros, Plant Manager

Name and Title (please type)

alberto.calleros@cemex.com

E-Mail address (if available)

10311 Cement Plant Road

Mailing Address

Brooksville, FL 34601

City, State, Zip Code

352-799-7881

Telephone Number

**CONTINGENCY PLAN
(EMERGENCY PROCEDURES)**

**CEMEX Construction Materials Florida, LLC
Brooksville South Cement Plant
Brooksville, Hernando County, Florida**

FDEP Alternative Fuel/Material Processing Facility
Renewal of Permit No. 22787-004-SO/31
WACS No. 40778

Plan Date: December 2012
Updated August 2018

Consultant:

Maxwell R. Lee, Ph.D., P.E.
Tammy Garcia – Environmental Scientist
Koogler and Associates, Inc.
www.kooglerassociates.com
P.O. Box 5127
Gainesville, Florida 32627-5127
(352) 377-5822

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1.0 INTRODUCTION

This Contingency Plan (Plan) has been developed in support of the permit renewal application for permit no. 22787-004-SO/31 for the CEMEX Brooksville South Cement Plant Alternative Fuel/Material Processing Facility in accordance with Chapters 62-701 and 62-711 F.A.C.

This Plan addresses practical measures implemented by CEMEX Construction Materials Florida, LLC at the Brooksville South Cement Plant in the event of an emergency. This Plan shall be kept at the Facility at all times and shall be accessible to Facility operators.

2.0 FACILITY DESCRIPTION

The Brooksville South Cement Plant (Facility) is owned and operated by CEMEX Construction Materials Florida, LLC (CEMEX). The Facility is located at 10311 Cement Plant Road in Brooksville, Hernando County. The entire property owned by CEMEX (Site) occupies approximately 10,000 acres. Most of the land use surrounding the Site is rural agriculture with some residential developments.

Onsite operations include cement manufacturing plant (Plant) and active mining operations that remove limestone, sand and clay. The Plant is situated in an old quarry and includes two dry-process rotary kilns, clinker coolers, finish mills, and numerous blending and storage silos. Mining operations are situated in the western and southern portions of the site. CEMEX mines soft limestone for the cement manufacturing operation and operates a rock crushing operation that processes hard limestone rock for road and building construction materials.

Raw materials used in the production of cement include but are not limited to limerock (calcium carbonate), limestone tailings (calcium carbonate and silica), and other mineral aggregates such as bauxite, power plant ash, mill scale and slag. The Cement Plant consists of Kiln No. 1 and Kiln No. 2, which utilize coal, used tires, and a variety of alternative fuel materials (AFM – Kiln 2 only) as fuel sources to heat the raw materials in a kiln to produce “clinker.” The clinker is ground into a powder and incorporated with gypsum in order to produce cement. The finished cement products are stored in silos from which tanker trucks are loaded for shipping. Only Kiln 2 is authorized by air permit to use alternative fuel materials (AFM).

3.0 CONTINGENCY PLAN (EMERGENCY PROCEDURES) [62-701.320(16) F.A.C.]

This Contingency Plan has been developed to provide information on emergency preparedness and response at the Facility. This Plan covers operational interruptions and emergencies such as fires, explosions, and natural disasters.

3.1 Responsible Persons – Emergency Coordinators

Primary Emergency Coordinator

Brent Steele – Environmental Manager
(352) 799-7881 – Office; (352) (Mobile)
brentc.steele@cemex.com

Secondary Emergency Coordinator

Alberto Calleros– Plant Manager
(352) 799-7881 – Office
Alberto.calleros@cemexusa.com

3.2 Procedures for Notification and Contact Information

The key person responsible for implementing this Contingency Plan is the Primary Emergency Coordinator. In the event that the Primary Emergency Coordinator is unavailable, the Secondary Emergency Coordinator or Back-up Emergency Coordinator (in that order) are the responsible parties to implement this Contingency Plan. The Emergency Coordinators have the complete authority to commit the resources of the Facility in the event of an emergency. If needed, the Emergency Coordinators may summon the assistance of outside organizations to assist with an emergency situation. The protocol for contacting the Emergency Coordinators and their duties are described below.

- Individuals aware of an emergency condition subject to this Contingency Plan should immediately contact their supervisor who, in turn, should contact the Primary Emergency Coordinator. If the Emergency Coordinator is unavailable, one of his alternates should be contacted.

- The Emergency Coordinator or his designee is responsible for Agency notifications when this Contingency Plan is implemented, where applicable.
- Whenever the Emergency Coordinator is advised of an emergency condition, he will immediately assess the potential hazards to on-site personnel and the potential impacts off-site. Factors to be considered include:
 - the materials involved in the incident;
 - the need for rescues;
 - potential hazards from gases or explosions;
 - surface water run-off from fire control; and,
 - the possibility of heat induced explosions.

Upon assessment, should the Emergency Coordinator determine that the possibility exists for serious danger to plant employees or to the surrounding community, the Emergency Coordinator will coordinate with plant operating personnel to shut down and/or isolate the area or process unit involved. If evacuations of the surrounding area are needed, the Hernando County Sheriff offices/Brooksville Police Department and Brooksville Fire Department will be advised of the situation. They will recommend and coordinate the evacuation of affected citizens in the adjacent community if necessary. A list of Emergency Contacts is provided in Table 1.

3.3 Emergency Procedures and Minimization of Impacts

The primary goal of the emergency response procedures is to eliminate potential harm or threat to Facility employees and the surrounding population. In general, this is accomplished by the following steps:

1. Contact the Emergency Coordinator.
2. Contact the Control Room Operator (CRO) to alert employees, if employees need to go to Rally Points. The CRO will assign a scout to meet emergency services at the Facility entrance if needed.

3. Managers or supervisors will:
 - Conduct a roll call
 - Organize search for any persons missing from roll call.
 - Treat all injured personnel
 - Assess property damage
 - Remain at designated area until released by the Emergency Coordinator
4. Shut down work in the affected area.
5. Shut down feed lines and additional equipment in the area as soon as necessary and practical.
6. Clear the area of all employees not actively involved in managing the contingency Situation.
7. Utilize barrier tape or barricades to prevent entry of unnecessary persons into the area.

3.4 Shut Down Procedures and Notification of Closure

In the event of an emergency, these provisions should be followed for those parts of the facility affected by the emergency:

- Contact the CRO. The CRO will contact the Emergency Coordinator and will notify all personnel, if employees should proceed to the Rally Points.
- Clear the area of all employees not actively involved in assisting with the emergency (e.g. fire-fighting) and direct them to the nearest Rally Point.
- Shut down work in the immediate area of the emergency, where needed.
- Shutdown any feed lines and equipment, as needed
- The Emergency Coordinator will contact neighbors and local/state/federal officials as necessary and applicable to notify them of the potential impacts of the emergency.

3.5 Equipment

The following equipment is available at the Facility to implement this Plan:

- Fire extinguishers are available throughout the Facility.
- Hoses are available in cabinets placed in ER#7, located directly under the #2 kiln main drive area.
- Earth moving equipment for excavating, spreading, compacting, and covering AFM
- Soil stockpile
- Reserve equipment is available at adjacent operations of the CEMEX facility in the event of a breakdown.
- Fire extinguishers are available throughout the Facility.
- Communications devices include a siren warning system, cell phones, and walkie-talkies.

3.6 Fire Protection and Fire Fighting Capabilities

In the case of a fire within an AFM pile at the Facility, all reasonable efforts shall be made to immediately extinguish or control the fire. If the fire cannot be extinguished or controlled within an hour, the Environmental Coordinator shall immediately implement this contingency plan.

3.6.1 Unplanned Ignition of AFM Materials Including Stored Tires in Trailers or Inside Tire Feed Equipment:

- Contact the CRO. The CRO will contact the Emergency Coordinator and the Production Supervisor. In addition, the Control Room Attendant will sound the alarms, if employees should proceed to the Rally Points.
- Clear the affected area of all employees and contractors and account for persons known to have been involved in the operations.
- Shut down work in the immediate area of the emergency.
- Shutdown any feed lines and equipment as needed.
- Using the stored material pile, the plant loader operator will build a containment berm around the area of fire to make sure water and burnt material is not allowed to enter the storm water ditches.

- Focus firefighting techniques on the concept of the "Fire Triangle". Specifically, eliminate/minimize fuel to the fire, reduce temperatures, and lower oxygen concentrations, where possible and practical.
- Establish fire watch.
- Remember, to extinguish a fire you must interrupt one or more of the essential elements of the fire triangle. You must reduce the temperature, eliminate the fuel, or eliminate the oxygen.
- The Emergency Coordinator will promptly notify all appropriate agencies of the Incident.
- If the fire cannot be extinguished or controlled within 48 hours, the Emergency Coordinator shall notify the local fire protection agency and seek its assistance, and shall also notify the local government and any neighbors likely to be affected by the fire.

TABLE 1 - EMERGENCY CONTACT INFORMATION

Agency	Contact Information	Action
For ALL Emergencies	911	Contact in cases of all emergency situations.
Brent Steele – Environmental Manager & Primary Emergency Coordinator	(352) 799-7881 – Office (352) 514-3683 - Mobile	Contact in cases of all emergency situations (fire, natural disaster, serious injury, etc.).
Florida Department of Environmental Protection SW District – Permitting Manager	Steve Morgan 13051 N Telecom Parkway Suite 101 Temple Terrace, FL 33637-0926 (813)470-5754	Contact in cases of fires or other emergencies that pose unanticipated threat to the public health or the environment.
Brooksville Fire Department	85 Veterans Ave. Brooksville, FL 34601 (352) 540-3840	Contact in cases of fire emergencies.
Hernando County Sheriff's Office	18900 Cortez Blvd Brooksville, FL 34601 (352) 754-6830	Contact in case of emergency.
Brooksville Police Department	87 Veterans Ave. Brooksville, FL 34601 (352) 754-6800	Contact in case of emergency.
Brooksville Regional Hospital	17240 Cortez Blvd. Brooksville, FL 34601 (352) 796-5111	Contact in cases of serious personal injury.
Springbrook Hospital	7007 Grove Road Spring Hill, FL 34609 (352) 596-4306	Contact in cases of serious personal injury.