

**From:** [Tammy Garcia](#)  
**To:** [Madden, Melissa](#)  
**Cc:** [Morgan, Steve](#); [Ramirez, Javier](#); [Wargo, Emily](#); [robing.simons@cemex.com](mailto:robing.simons@cemex.com); [Dr. Max Lee](#)  
**Subject:** RE: 307\_18\_07 and 12 CEMEX Brooksville South AFM RAI Response and WTP Modification  
**Date:** Tuesday, November 27, 2018 9:57:50 AM  
**Attachments:** [CES\\_RevLetter.pdf](#)  
[307\\_18\\_07\\_SW\\_RenewApp\\_AppInfo\\_RAI2\\_2018\\_11\\_26.pdf](#)  
[CEMEX\\_AuthLetter.pdf](#)

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Hi Melissa,

Please find attached the requested information for your requests below for the CEMEX Brooksville South AFM SW Permit Renewal (DEP Application No. 22787-006-SO/31) and Waste Tire Processing Permit minor modification request (22787-005-WT):

- *Since the Operation Plan was revised and reformatted based on the application form change, it appears that a few sections were excluded from the new plan, including those items in Rule 62-701.710(4), F.A.C. re: Operators and Spotters, Objectionable Odors, Access Control and Regulated Hazardous Wastes (Sections 3.9.8-3.9.12 of 2013 Op Plan). Please ensure that all requirements of Rule 62-701.710(4), F.A.C. are addressed, as applicable.*

**RESPONSE: The revised Application Information document with the revised Operations Plan is attached. See pages 19-21 - new/revised information is underlined. The attached document does not have the application form or appendices, which you already have.**

- *It appears that CES's quote still lists disposal as "C&D and Natural Wood Materials". This quote must be for Class I to be consistent with Section 4.0 of the Closure Plan. Please provide a revised third-party quote for loading, hauling and disposal of 5,200 tons of AFM as Class I Waste.*

**RESPONSE: Please find attached a revised quote from CES referencing Class I Waste.**

- *...please provide a letter from an authorized representative of CEMEX which indicates their intent to apply for the below permit modification [22787-005-WT for the change in storage location].*

**RESPONSE: Please find attached a letter from a CEMEX authorized representative requesting the subject permit modification.**

If you need anything further for these two projects, please contact me.

Thank you,  
Tammy

Tammy L. Garcia  
Environmental Scientist II  
**Koogler and Associates, Inc.**  
[www.kooglerassociates.com](http://www.kooglerassociates.com)  
Mail: PO Box 5127 |Gainesville, FL 32627-5127  
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[tgarcia@kooglerassociates.com](mailto:tgarcia@kooglerassociates.com)

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**From:** Madden, Melissa <Melissa.Madden@FloridaDEP.gov>

**Sent:** Wednesday, November 21, 2018 10:58 AM

**To:** Tammy Garcia <tgarcia@kooglerassociates.com>

**Cc:** Morgan, Steve <Steve.Morgan@FloridaDEP.gov>; Ramirez, Javier <Javier.Ramirez@FloridaDEP.gov>; Wargo, Emily <Emily.Wargo@FloridaDEP.gov>; robing.simons@cemex.com; Brent C Steele <brentc.steele@cemex.com>; Dr. Max Lee <mlee@kooglerassociates.com>

**Subject:** RE: 307\_18\_07 and 12 CEMEX Brooksville South AFM RAI Response and WTP Modification

Tammy,

Javier and I are reviewing the responses to the RAI for pending permit no. 22787-006-SO/31. We tried to call and leave you a voicemail, but the call was cutoff. I think you are out of the office today anyway.

There are just a few things we need additional information on:

1. Since the Operation Plan was revised and reformatted based on the application form change, it appears that a few sections were excluded from the new plan, including those items in Rule 62-701.710(4), F.A.C. re: Operators and Spotters, Objectionable Odors, Access Control and Regulated Hazardous Wastes (Sections 3.9.8-3.9.12 of 2013 Op Plan). Please ensure that all requirements of Rule 62-701.710(4), F.A.C. are addressed, as applicable.
2. It appears that CES's quote still lists disposal as "C&D and Natural Wood Materials". This quote must be for Class I to be consistent with Section 4.0 of the Closure Plan. Please provide a revised third-party quote for loading, hauling and disposal of 5,200 tons of AFM as Class I Waste.

Please provide the requested information by November 30 so that we may continue to review the submittal timely. We can discuss further next week if necessary. Happy Thanksgiving!

Please feel free to contact me with any questions or concerns.

Thanks, Melissa

*Melissa Madden*

Environmental Consultant – Solid Waste  
Florida Department of Environmental Protection, Southwest District  
13051 N Telecom Parkway, Suite 101, Temple Terrace, FL 33637



(813) 470-5795 Phone | (813) 470-5995 Fax  
[melissa.madden@floridadep.gov](mailto:melissa.madden@floridadep.gov) **NEW!**

**Note:** All your favorite people at the FDEP have new email addresses ([@floridadep.gov](mailto:@floridadep.gov))! Please make sure to update your contact list!

---

**From:** Morgan, Steve  
**Sent:** Friday, November 16, 2018 5:08 PM  
**To:** Ramirez, Javier <[Javier.Ramirez@FloridaDEP.gov](mailto:Javier.Ramirez@FloridaDEP.gov)>; Felix, Diana <[Diana.Felix@FloridaDEP.gov](mailto:Diana.Felix@FloridaDEP.gov)>  
**Cc:** Madden, Melissa <[Melissa.Madden@FloridaDEP.gov](mailto:Melissa.Madden@FloridaDEP.gov)>  
**Subject:** FW: 307\_18\_07 and 12 CEMEX Brooksville South AFM RAI Response and WTP Modification

Javier:

One of the attached documents is their response to your RAI for Permit Application #22787-006-SO/31.



Steven G. Morgan  
**Air & Solid Waste Permitting Manager**  
Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Parkway, Suite 101  
Temple Terrace, FL 33637-0926  
[Steve.Morgan@floridadep.gov](mailto:Steve.Morgan@floridadep.gov)  
Direct line: 813.470.5754  
Fax: 813.470.5996

---

**From:** Tammy Garcia [<mailto:tgarcia@kooglerassociates.com>]  
**Sent:** Friday, November 16, 2018 3:37 PM  
**To:** Morgan, Steve <[Steve.Morgan@FloridaDEP.gov](mailto:Steve.Morgan@FloridaDEP.gov)>  
**Cc:** Wargo, Emily <[Emily.Wargo@FloridaDEP.gov](mailto:Emily.Wargo@FloridaDEP.gov)>; Robin G Simons (<[robing.simons@cemex.com](mailto:robing.simons@cemex.com)>)  
<[robing.simons@cemex.com](mailto:robing.simons@cemex.com)>; Brent C Steele (<[brentc.steele@cemex.com](mailto:brentc.steele@cemex.com)>)  
<[brentc.steele@cemex.com](mailto:brentc.steele@cemex.com)>; Dr. Max Lee <[mlee@kooglerassociates.com](mailto:mlee@kooglerassociates.com)>  
**Subject:** RE: 307\_18\_07 and 12 CEMEX Brooksville South AFM RAI Response and WTP Modification

Steve,

Please find attached an electronic copy of our response to the CEMEX Brooksville South RAI for the AFM SW Permit Renewal, DEP Application No. 22787-006-SO/31 and the minor modification request for the Waste Tire Processing Permit 22787-005-WT addressing the move in location of the outside storage of trailers. A hard copy of each is being sent via USPS Priority along with the \$250 application fee for the WTP modification.

If you have any questions, please contact me.

Thank you,  
Tammy

Tammy L. Garcia  
Environmental Scientist II  
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**From:** Wargo, Emily <[Emily.Wargo@FloridaDEP.gov](mailto:Emily.Wargo@FloridaDEP.gov)>  
**Sent:** Monday, October 29, 2018 4:52 PM  
**To:** Tammy Garcia <[tgarcia@kooglerassociates.com](mailto:tgarcia@kooglerassociates.com)>  
**Cc:** Morgan, Steve <[Steve.Morgan@FloridaDEP.gov](mailto:Steve.Morgan@FloridaDEP.gov)>  
**Subject:** RE: 307\_18\_XX CEMEX Brooksville South WT Processing Permit

Hi Tammy,

I spoke with Steve, and to change the storage location of the trailers we would need to see updated site and operation plans that include the new storage area. It would be considered a minor modification to the permit that you would need to submit an application for with a \$250 fee.

Please let me know if you have any questions.

Regards,

Emily



**Emily Wargo**  
Florida Department of Environmental Protection  
Southwest District  
Engineering Specialist II  
[Emily.Wargo@FloridaDEP.gov](mailto:Emily.Wargo@FloridaDEP.gov)  
Office: 813-470-5942

-  
-

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**From:** Tammy Garcia [<mailto:tgarcia@kooglerassociates.com>]  
**Sent:** Wednesday, October 24, 2018 1:57 PM  
**To:** Morgan, Steve <[Steve.Morgan@FloridaDEP.gov](mailto:Steve.Morgan@FloridaDEP.gov)>  
**Subject:** 307\_18\_XX CEMEX Brooksville South WT Processing Permit

Hi Steve,

What would the Department want submitted to change the storage location of trailers for tires from one area to another for the attached permit for CEMEX Brooksville South? No change in quantities or anything else, just a change in location of trailers for storage. And what would the Department issue - a modified permit?

Thank you,  
Tammy

Tammy L. Garcia  
Environmental Scientist II  
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**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

Updated: November 26, 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  
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## **APPENDIX**

### **1. Site Figures**

Figure 1 - Site Plan Aerial

Figure 2 – Topographic Map

Figure 3 – Boundary Survey and Legal Description

### **2. Closure Plan**



## 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.

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.<sup>1</sup>
4. Promotion of a more diverse energy supply which improves the viability of CEMEX and promotes and supports the AFM market.

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<sup>1</sup><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.

*Insert 4 page application*

CEMEX Construction Materials Florida, LLC  
Brooksville South Cement Plant  
FDEP SW Permit Renewal, 22787-004-SO/31

August 6, 2018  
Updated November 26, 2018  
307-18-07





**3.1 Permit Application Section B. Additional Information**

***B.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 times; and***
- h. The expected disposition of materials after leaving the facility.***

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.<sup>2</sup>

- 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.
- 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.

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<sup>2</sup> 40 CFR 98



- 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 five separate locations on-site. The current solid waste permit allows for the storage of 4900 tons on-site. The storage capacity is proposed to increase with the 2018 permit renewal to allow 5200 tons onsite by increasing the 100 tons of capacity stored outdoors in trailers to 400 tons. The storage area for the trailers has moved to a new location since the original permit was issued (See Appendix 1, Figure 1).

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	--	--	--	--
Outdoor Storage – Trailers (400 Tons)	X	X	X	X	X	X	X	X	X
Total on-site Storage	5200 tons								

\* 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.

The total storage capacity of the cement plant locations on-site is 5,200 tons. As such, the Brooksville South Cement Plant has a maximum of 5,200 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.

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 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 three designated outside storage areas for uncovered AFM (note that 400 tons is in enclosed trailers) totaling 5,200 tons. 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.

**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.

**Outside Trailer Storage – 400 tons.** Drainage is directed to vegetated areas adjacent to the storage trailer areas. However, all AFM in this location will be stored in enclosed trailers.

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.



***B.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 (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. 400 feet due to the large size of the facility and depicting the required 500 foot boundary from the storage areas. We are respectfully requesting an exemption from the requirement that the scale be not greater than 200 feet to the inch.

***B.3. Provide a boundary survey and legal description of the property (62-701.710(2)(c), F.A.C.***

Boundary surveys with legal descriptions are provided as Figures 3A, 3B and 3C in Appendix 1.

***B.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)(e), F.A.C.).***

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.

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 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.

The receipt of AFM is monitored as described in Section 3.1. 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 Section 3.1 for additional details on the handling and storage of AFM.

***B.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.)***

*Material 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. If the facility has reached its permitted capacity for storage of wastes or recyclable materials, it will not accept additional waste for processing until sufficient capacity has been restored.

*Material Preparation*

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, un treated 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.

Material 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).

Responsible Personnel

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

Plant Manager: Alberto Calleros  
Environmental Manager: Brent Steele

Equipment

Information on equipment is included in Section 3.1.

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.

Objectionable Odors and Stored Putrescible Wastes

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. Stored putrescible wastes shall be processed within 48 hours. If unauthorized waste is received, it shall be segregated and transported to an authorized facility within 30 days of receipt.

Fire Protection

The facility has adequate fire protection available at all times.

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.

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.

*Stormwater Control*

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 semi-annual 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).

*Best Management Practices (BMP) Plan*

<b>Table 2. Best Management Practices Plan</b>	
Practice	Description
Minimization of Fugitive Dust	<ol style="list-style-type: none"> <li>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.</li> <li>2) Periodic maintenance shall be performed to maintain off-loading locations and associated drop point integrity as necessary.</li> </ol>
Minimization of AFM in Contact with Stormwater	<ol style="list-style-type: none"> <li>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).</li> </ol>
Fire Prevention/ Spontaneous Combustion Minimization	<ol style="list-style-type: none"> <li>1) The Emergency Response Plan includes:                             <ol style="list-style-type: none"> <li>a. Facility maintains a separate Fire Prevention and Safety Plan on-site.</li> <li>b. The local Fire Department performs an annual inspection of the facility.</li> <li>c. All buildings and mobile equipment are equipped with firefighting equipment as required by all county, state, and federal codes and regulations.</li> </ol> </li> <li>2) Proper storage of AFM to ensure that heat generated from pile compaction does not result in spontaneous combustion.</li> <li>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.</li> </ol>
Quality Assurance	<ol style="list-style-type: none"> <li>1) The AFM shall be delivered to the Plant with all loads properly secured, contained, and covered.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol>
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.

<i>Safety</i>	<i>CEMEX maintains a separate Safety Plan on-site.</i>
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*Recordkeeping Requirements*

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 are compiled on a monthly basis and made available for inspection by the Department. The facility retains the records for a minimum of three years.

***B.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.)***

The Closure Plan is maintained as a separate document and was updated for this permit renewal application in 2018. A revised Closure Plan is provided as Appendix 2. A copy of the approved Closure Plan will be kept on file at the Facility.

***B.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.)***

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).

***B.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.).***

Financial assurance documentation has not changed and is on file at the Department. Travelers Bond No. 106077080 for \$350,000.

***B.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.***

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

***B.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.).***

*The Department has this information on file.*



November 26, 2018

Robin Simons  
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 Robin:

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 load, transport and dispose of up to 5,200 tons of AFM as Class I Waste 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 5 years. Should you have any questions, please call me. Thank you for the opportunity to be of service.

Sincerely,



George K. Foster, P.G.

President



Alberto Calleros  
CEMEX Construction Materials Florida, LLC  
10311 Cement Plant Road  
Brooksville, FL 34601  
November 26, 2018

Steve Morgan  
FDEP – SW District – Solid Waste Section  
Florida Department of Environmental Protection  
13051 North Telecom Parkway, Suite 101  
Temple Terrace, FL 33637

Dear Steve Morgan:

CEMEX Construction Materials Florida, LLC, is requesting a minor modification for the Brooksville South Waste Tire Processing Permit No. 22787-005-WT. The attachment references a new tire storage location for the tire trailers.

If you have any questions, please contact me at 352-799-7881.

Sincerely,

A handwritten signature in blue ink, appearing to read "Call M", written over a faint, larger "Call M" watermark.

Alberto Calleros  
Brooksville South Plant Manager