From:	Ramirez, Javier
To:	Ramirez, Javier
Subject:	FW: 307_18_07 and 12 CEMEX Brooksville South AFM RAI Response and WTP Modification
Date:	Wednesday, November 21, 2018 9:11:11 AM
Attachments:	307_18_07_RAI_ResponsePkg_2018_11_16.pdf 307_18_12_WTP_MinorModPkg_2018_11_16.pdf Cemex South Cement Plant WTPF WT-MM 11-16-18.docx

---

From: Tammy Garcia [mailto:tgarcia@kooglerassociates.com]
Sent: Friday, November 16, 2018 3:37 PM
To: Morgan, Steve <Steve.Morgan@FloridaDEP.gov>
Cc: Wargo, Emily <Emily.Wargo@FloridaDEP.gov>; Robin G Simons (robing.simons@cemex.com) <robing.simons@cemex.com>; Brent C Steele (brentc.steele@cemex.com) <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

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
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

CONFIDENTIALITY: This message is the property of Koogler and Associates, Inc. The information contained in this message may contain legally privileged and confidential information. It is intended only for the use of the person(s) or addressee(s) named above. If you are not the intended recipient, you are hereby notified that any review, disclosure, distribution or duplication of this communication, and the information contained in it, is strictly prohibited. If you are not the intended recipient, please contact the sender by electronic mail and immediately destroy all copies of the original message.

From: Wargo, Emily <Emily.Wargo@FloridaDEP.gov>
Sent: Monday, October 29, 2018 4:52 PM
To: Tammy Garcia <tgarcia@kooglerassociates.com>

Cc: Morgan, Steve <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
Office: 813-470-5942

PLEASE NOTE: Florida has a very broad public records law. Electronic communications regarding state business are public records available upon request. Your e-mail communications may therefore be subject to public disclosure.

Please consider the environment before printing this email.

From: Tammy Garcia [mailto:tgarcia@kooglerassociates.com]
Sent: Wednesday, October 24, 2018 1:57 PM
To: Morgan, Steve <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
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

CONFIDENTIALITY: This message is the property of Koogler and Associates, Inc. The information contained in this message may contain legally privileged and confidential information. It is intended only for the use of the person(s) or addressee(s) named above. If you are not the intended recipient, you are hereby notified that any review, disclosure, distribution or duplication of this communication, and the information contained in it, is strictly prohibited. If you are not the intended recipient, please contact the sender by electronic mail and immediately destroy all copies of the original message.



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

307-18-07
November 16, 2018

Sent via email: SWD_waste@dep.state.fl.us

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

RE: ***Request for Additional Information***
Alternative Fuel/Material Permit Renewal Application, 62-701, FAC
Brooksville South Cement Plant-CEMEX Construction Materials Florida, LLC
Brooksville, Hernando County, Florida
DEP Application No. 22787-006-SO/31

Dear Mr. Morgan:

On behalf of CEMEX Construction Materials Florida, LLC (CEMEX), Koogler and Associates, Inc. is responding to your request for additional information (RAI) dated August 29, 2018. The RAI items are included (either in part or full) with our responses below.

Section 1.0 – Introduction

1. "This section states, "*while the use of AFM has been determined by FDEP Solid Waste Department in Tallahassee to be not subject to Solid Waste permitting, CEMEX voluntary committed to use solid waste permitting for AFM operations to ensure above and beyond required stewardship of environmental assurance compliance.*". After consultation with the Division of Waste Management – Solid Waste section in Tallahassee, it does not appear that this is the Department's universal determination for processing, storage, or disposal of AFM Material statewide. The Department has issued site-specific determinations on this topic in regard to use of these materials as fuels at other facilities. The CEMEX waste processing permit is not voluntary, but required by Department rule. Please revise this section accordingly."
   Response: The text applicable to this request has been removed from the Engineer Report.

Section 3.0 Application with Section B, Additional Information (Engineering Report)

2. "DEP Form 62-701.900(4), F.A.C., Effective Date February 15, 2015
   (a) Item A.5. DEP ID No. Please revise the DEP ID Number to reflect WACS No. 40778
   Response: The DEP ID Number on the application form has been revised accordingly.

(b) Item A.13. Closing Costs. Please review to be consistent with revised closure cost estimate [See Comment #10 below]."

Response: The Closing Costs in Section 3.0 has been revised to be consistent with the revised closure cost estimate. An updated Closure Plan with Closing Costs is provided as Appendix 2.

(c) "Part B. Additional Information. The provided engineering report appears to follow the previous application form and organization of Rule 62-701.710 F.A.C. (Effective January 6, 2010). The application form and applicable rules have been updated (effective February 15, 2015) since the previous permit was issued. There are numerous rule references throughout the engineering report that are outdated, which has been identified in the comments below. Please revise this report to follow the updated application form and/or at a minimum, revise the following rule citations to be accurate and verify that all portions of the updated application for and revised rule are addressed.

Response: The Engineering Report has been revised in accordance with the format of the application form that was updated in February 15, 2015 and rule references have been updated, as applicable.

(d) "Item C.1 Facility Name. Please verify the name as AFM Storage and Processing Facility."

Response: The Facility name has been corrected to be AFM Storage and Processing Facility.

Section 3.1 Description of Alternative Fuel/Materials (AFM) and Table 1. AFM Storage

3. "This section indicates that the storage areas for this facility are being reduced by 100 tons and proposes storage of materials off-site at the Gregg Mine Property (400 tons). In accordance with Rule 62-701.320(1) F.A.C., the storage of alternative fuel materials at the Gregg Mine would require a solid waste management facility permit. (a separate solid permit or solid waste conditions incorporated into another DEP permit, if applicable). Therefore, no storage or management of AFM at the Gregg Mine shall occur prior to obtaining authorization from the Department's Solid Waste Section. Please verify and remove references to storing AFM at the Gregg Mine facility from this section and other applicable sections of this application."

Response: After further consideration, CEMEX has decided to increase the tonnage of storage capacity on-site from 100 tons to 400 tons, and instead of proposing the storage location on the Gregg Mine property, will locate it on-site at the location shown on Figure 1 in Appendix 1. The storage remains in enclosed trailers.

Section 3.2 Site Plan

4. "Please verify the setback from potable wells rule language in Rule 62-701.720(2)(b), F.A.C. and revise this section to read,, "*A site plan, of 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 and potable water wells on or within **500** feet of the site.*".
   Response: The section has been revised as requested.

Section 3.4 Description of Loading, Unloading, Storage and Processing Areas

5. "The paragraph which begins "The ASB has a clay lined floor..." appears to be a duplicate of the paragraph below under header Additive Storage Building. Please verify and delete the initial duplicated paragraph as appropriate."
   Response: The duplicate paragraph has been deleted.

Section 3.7 Boundary Survey

6. "Please provide or specifically reference previously submitted boundary survey, include date of document and submittal date in order to comply with Rule 62-701.320(10(c), F.A.C."
   Response: Boundary and survey information was submitted and accepted in the application package submittal on September 25, 2012, in Appendix 1. However, a copy of a boundary survey and legal description for the site is also enclosed (Appendix 1 – Figures 3A, 3B and 3C)

Appendix A. Figure 1 – Site Plan Aerial

7. "Based on the responses to Item 3 above, please remove the off-site Gregg Mine Trailer Storage (up to 400 tons) location, as appropriate.
8. Please include the "approx. 500 feet boundary from storage and processing areas" as shown on the legend.
9. When comparing this site plan to the previously approved plan (2013), it appears that several of the AFM storage areas in and around the plant were removed from the site plan. Please verify that all storage areas are included on the Site Plan and revise as necessary."

Response: The proposed off-site storage area at the Gregg Mine has been removed. The 400 tons of storage in enclosed trailers will be located on site as shown on Figure 1. A note showing that the red line is 500 feet from storage and processing areas has been added to Figure 1. All the storage areas are depicted on Figure 1 in Appendix 1.

Closure Plan for CEMEX Construction Materials Florida, LLC. Updated August 2018.

10. "Subsection 4.0 Closure Cost Estimates, Removal/Disposal of AFM. In Section 1 of the closure plan as well as other portions of the application, the quantity for storage was reduced from 4900 tons to 4800 tons. However, this section and calculation of closure costs still provides for 4900 tons. Please review and revise as appropriate."

Response: The quantity of storage is now 5200 tons. This is an increase of 300 tons over the existing permitted storage amount, and results in an increase of 300 tons in the calculation of closure costs. The closure costs have been updated throughout the application accordingly.

Attachments A. AFM Removal Estimate

11. "Please verify the Cost Proposal for Alternative Fuels transport and Disposal letter submitted by Creative Environmental Solutions, Inc. (CES). The letter indicates it is for disposal of 4900 tons of alternative fuel material (AFM) as "C&D and Natural Wood Materials". The quote was provided by a third-party consultant which is not in the solid waste hauling and disposal business, nor was the final disposal facility listed. Section 4.0 of the Closure Plan indicates that this material will be disposed of as Class I Waste. The Department's expectation is that these materials would be disposed of as Class I Waste. Additionally, the quote provided is only valid for one year and it is unclear if routine inflation-adjustment would be appropriate based on this statement. Please provide a revised third-party quote for the loading, hauling and disposal of the total quantity of AFM proposed to be stored on site as Class I waste."

    Response. Creative Environmental Solutions, Inc. (CES) is a Department Term Contractor that regularly excavates and transports contaminated soil all across Florida. Additionally, CES would be hired to do the scope of work listed in their cost estimate and would subcontract out portions they do not conduct in-house. CES revised the estimate to state that the quote would be valid for five years and is for 5200 tons. The revised quote is attached. Therefore, we believe this revised estimate should be acceptable to the Department.

Attachment C Financial Assurance – Cost Estimate Form 62-701.900(2) F.A.C.

12. "The costs for disposal and hauling of AFM was included in Part IV. Item 8, Active Gas Extraction Control. These costs should be in Item 13. Please revise the form as appropriate."

    Response: The form has been revised and the costs for the disposal and hauling have been added in Item 13.

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

Regards,

Tammy L. Garcia

Tammy L. Garcia
Environmental Scientist II

/tlg

Enclosures

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

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 16, 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

Table of Contents

1.0 INTRODUCTION 1
2.0 BACKGROUND INFORMATION 2
2.1 Permitting 2
3.0 APPLICATION with Section B, Additional Information 2
3.1 Permit Application Section B. Additional Information 7
B.2. Attach a site plan 17
Material Receiving 19
Material Preparation 19
Material Transport, Handling, and Storage 20
Responsible Personnel 20
Equipment 20
Stormwater Control 20
Best Management Practices (BMP) Plan 21
Recordkeeping Requirements 22
Access 22
Regulated Hazardous Wastes 23

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.[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: WACS 40778 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: $ 318,447.80 including 10% contingency

14. Anticipated construction starting and completion dates:

From: N/A To: N/A

15. Expected volume of waste to be received: yds^3/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.

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 AFM 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

11/16/2018
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)

58091
Florida Registration Number
(please affix seal)

MAXWELL R. LEE LICENSE NO. 58091 STATE OF FLORIDA PROFESSIONAL ENGINEER

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

Date

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. [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.

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.

[2] 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.

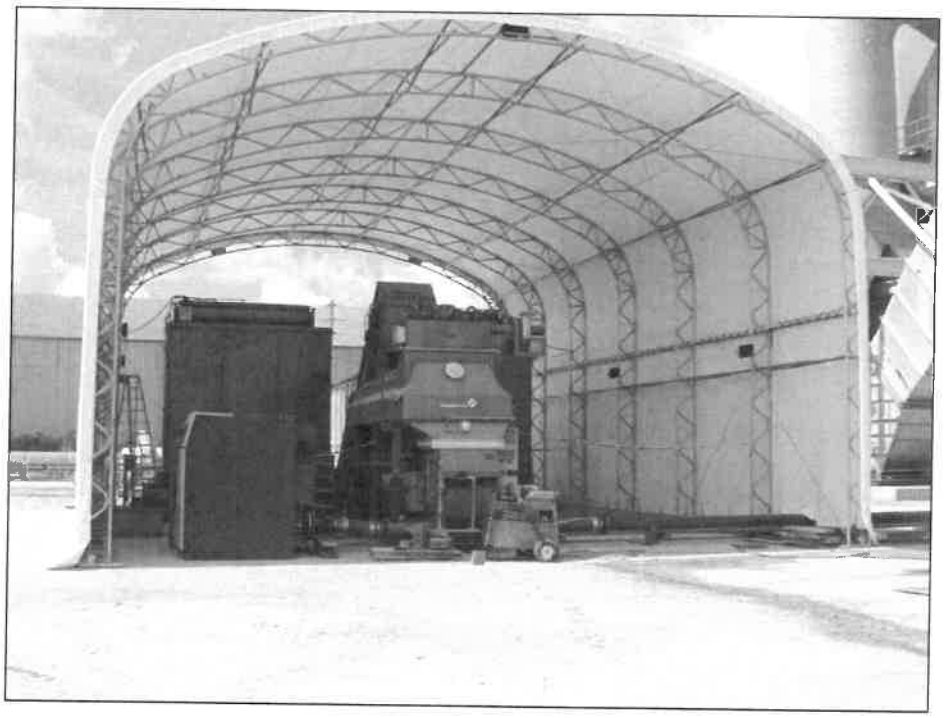


Photo 1. A typical covered feeder system



Photo 2. Two offloading docks of typical feeder system

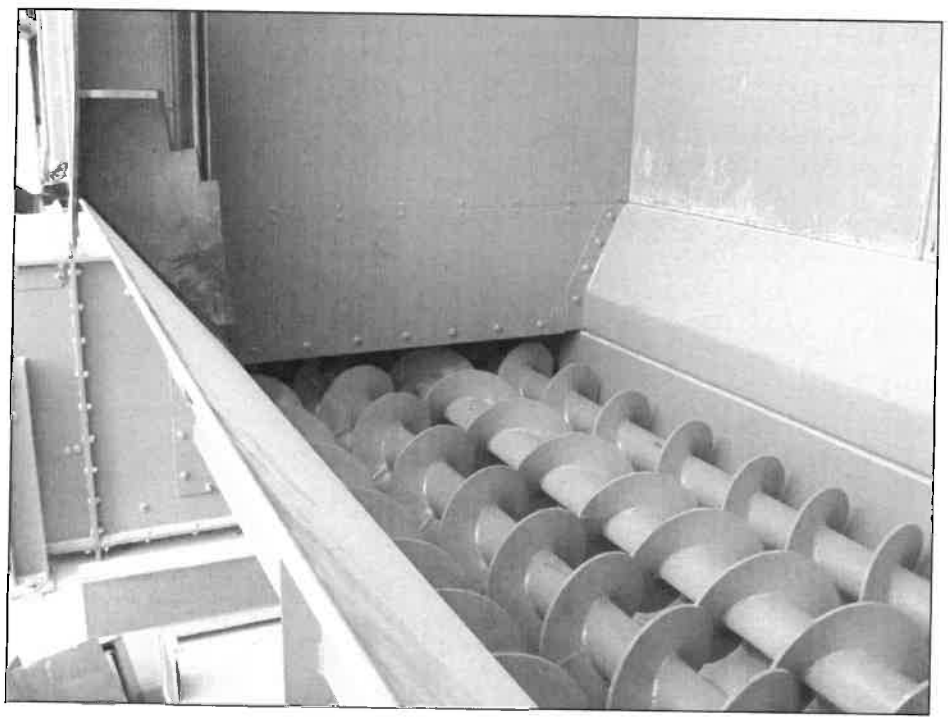


Photo 3. Typical screw conveyor in bottom of offloading ports



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

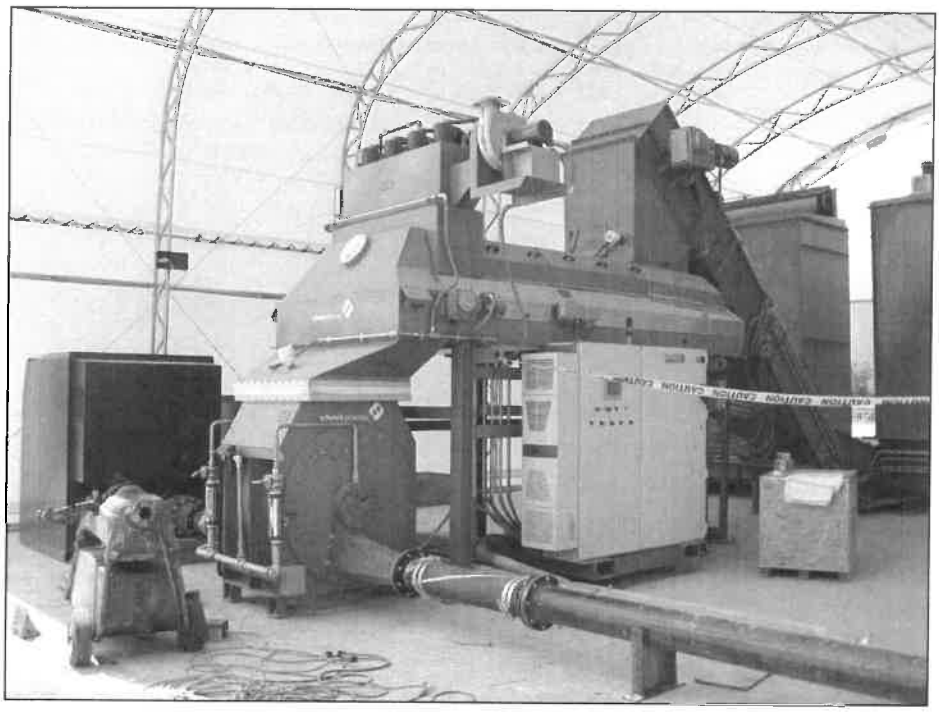


Photo 5. Typical Pneumatic blower from metering system to injection porthole

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.

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.

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

Table 2. Best Management Practices Plan

Practice	Description
Minimization of Fugitive Dust	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	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	1) The Emergency Response Plan includes: a. Facility maintains a separate Fire Prevention and Safety Plan on-site. b. The local Fire Department performs an annual inspection of the facility. c. All buildings and mobile equipment are equipped with firefighting equipment as required by all county, state, and federal codes and regulations. 2) Proper storage of AFM to ensure that heat generated from pile compaction does not result in spontaneous combustion. 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.
Quality Assurance	1) The AFM shall be delivered to the Plant with all loads properly secured, contained, and covered. 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. 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. 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.
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.

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).

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.

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.

APPENDIX

1. **Figures**
   - **Figure 1 – Site Plan Aerial**
   - **Figure 2 – Topographic Map**
   - **Figures 3A, 3B and 3C – Boundary Survey and Legal Description**

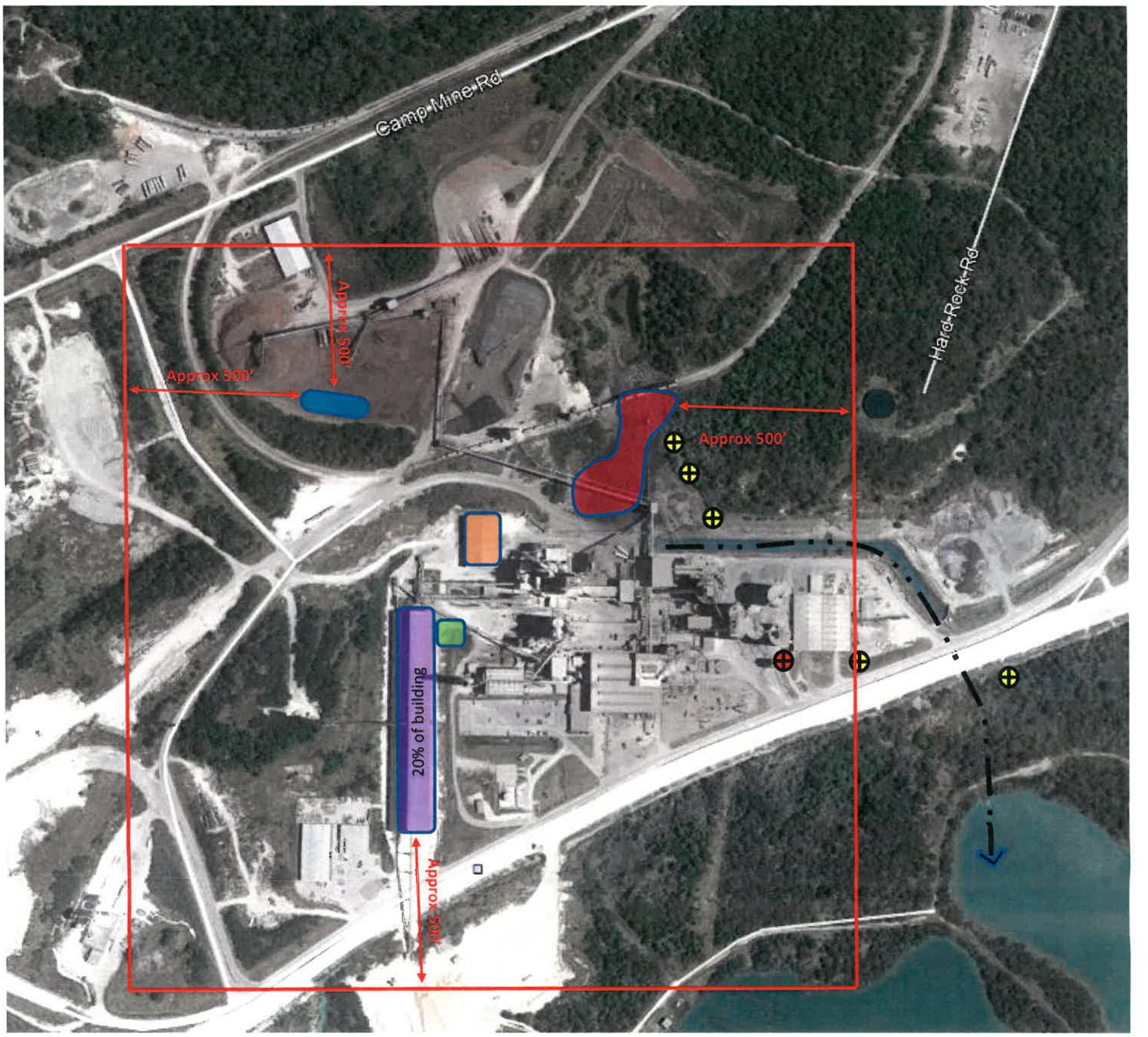
2. **Closure Plan**

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

1

FIGURES

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES



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)*
	Approx. location of wells (FDEP)		ASB Storage area (1,000 tons, covered)
	Approx location of PWS well		A-frame Storage (1,000 tons covered)
	No jurisdictional wetlands within 200 feet of storage and processing areas		Outside AFM Trailer Storage (400 tons)
	No other potable wells within 500 feet of site *https://ca.dep.state.fl.us/mapdirect/*		

Professional Engineer Certification

11/13/18

Maxwell R. Lee, PhD, P.E. Date

P.E. No. 58091

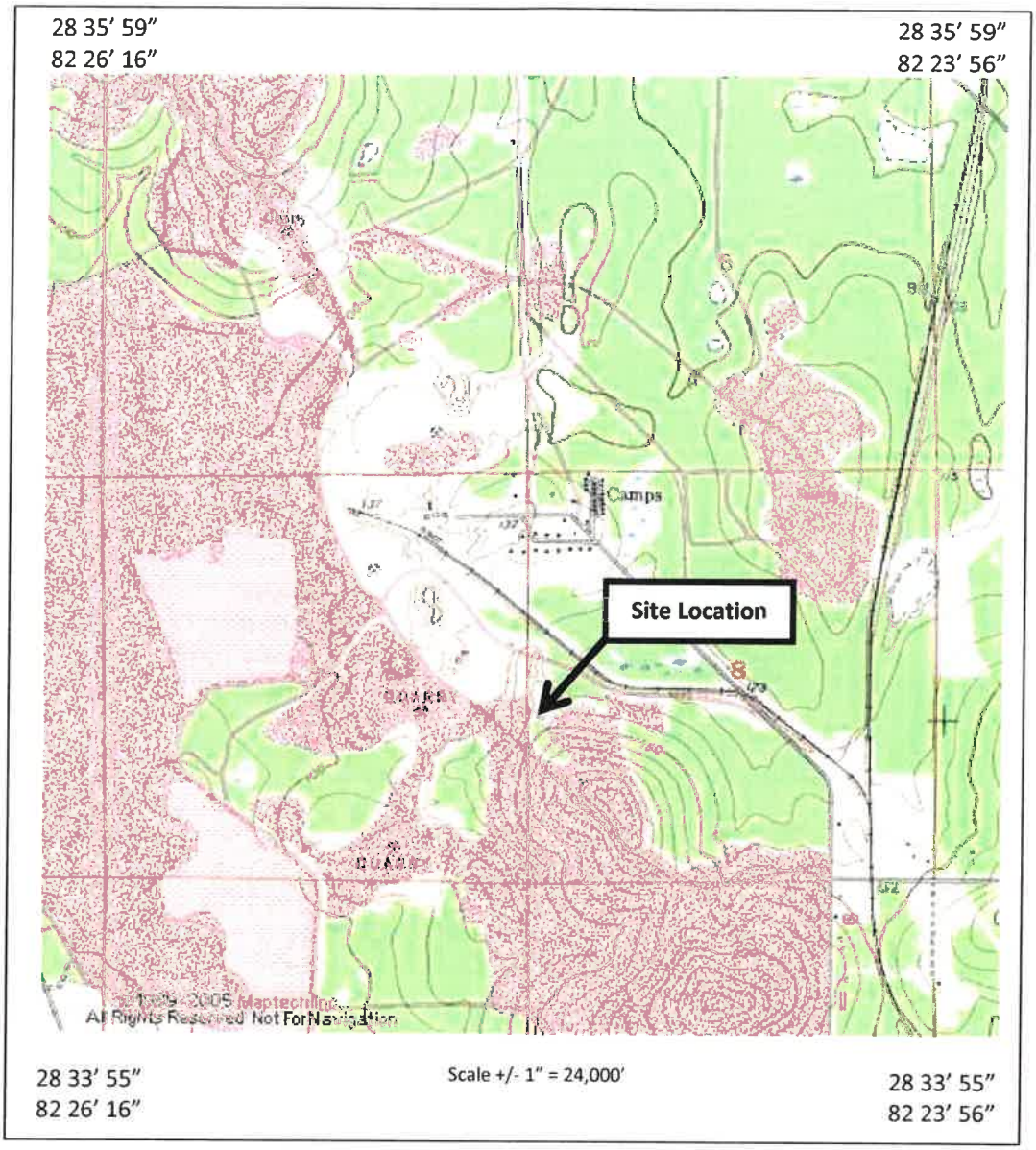
MAXWELL R. LEE LICENSE No. 58091 STATE OF FLORIDA PROFESSIONAL ENGINEER

Scale 1"= +/- 400'

Aerial Image from Google Earth Image Date 03-17-2017

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)

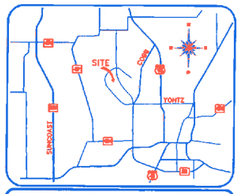
Professional Engineer Certification

MAXWELL R. LEE LICENSE No. 58091 STATE OF FLORIDA PROFESSIONAL ENGINEER

Maxwell R. Lee, Ph.D., P.E. Date
P.E. No. 58091

FIGURE 2
USGS Topographic Map
CEMEX Brooksville South
Alternative Fuel Material
Permit Renewal Application, 62-701, FAC
Brooksville, Hernando County, FL

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX 377-7158



VICINITY MAP

NOT TO SCALE

STANDARD LEGEND

- MONUMENT FOUND
- MONUMENT SET
- P.K. NAIL FOUND
- P.K. NAIL SET
- FND X MARK
- SET X MARK
- R.R. SPIKE FOUND
- R.R. SPIKE SET
- BENCHMARK
- CONC. R/W MARKER
- (R) RECORD DATA
- (M) MEASURED DATA
- (C) CALCULATED DATA
- R/W RIGHT OF WAY
- BSL BACK SET LINE
- RCP REINFORCED CONC PIPE
- CMP CORRUGATED METAL PIPE
- PVC PLASTIC PIPE
- MTL METAL
- AGL ABOVE GROUND LEVEL
- F.P. FOOTPRINT
- L/S LANDSCAPING
- TREE
- POWERPOLE
- GUY WIRE
- LIGHT POLE
- STREET LIGHT POLE
- ELEC. TRANSFORMER
- AIR CONDITIONER
- BURIED ELECTRIC
- O/HE OVERHEAD ELECTRIC
- ELEC. MANHOLE
- ELECTRIC METER
- WATER LINE
- WATER MANHOLE
- WATER VALVE
- WATER METER
- HYDRANT
- CHECK FLOW PREVENTOR
- GAS LINE
- GAS VALVE
- GAS METER
- BOLLARD
- BORE HOLE
- MONITORING WELL
- MAIL BOX
- UNKNOWN MANHOLE
- SQUARE METAL LID
- FUEL TANK LID
- FLAG POLE
- SANITARY SEWER LINE
- SEWER MANHOLE
- SEWER VENT
- SEPTIC TANK LINE
- SEPTIC TANK
- PAY PHONE
- TELEPHONE BOX
- TELEPHONE MANHOLE
- TELEPHONE POLE
- TELEPHONE LINE
- O/HT OVERHEAD TELEPHONE
- UNDERGROUND TELEPHONE MARKER
- CABLE TELEVISION
- O/HC OVERHEAD CABLE
- CABLE BOX
- UNDERGROUND CABLE MARKER
- TRAFFIC MARK
- TRAFFIC MANHOLE
- TRAFFIC SIGNAL BOX
- STOP STOP SIGN
- SIGN

NOTE:
THIS SURVEY SHALL NOT BE USED WITH AN AFFIDAVIT OR LETTER OF ANY KIND FOR REUSE INCLUDING, BUT NOT LIMITED TO, FUTURE CLOSINGS, MORTGAGES, PLOT PLANS, CONSTRUCTION, LANDSCAPING, PERMITTING, ETC. IT IS A VIOLATION OF THE FEDERAL COPYRIGHT ACT TO COPY OR MODIFY AND REUSE THIS SURVEY BEYOND THE DATE AND SCOPE. U.S. SURVEYOR, ITS ASSOCIATES, AND/OR AGENTS SHALL NOT BE LIABLE FOR USE OF THIS SURVEY BY ANY OTHER ENTITIES OR PERSONS FOR ANY PURPOSE BEYOND THE ORIGINAL DATE, SCOPE.

ALTA/ACSM LAND TITLE SURVEY

SURVEYOR'S CERTIFICATION

TO: CLIENT

THIS IS TO CERTIFY THAT THIS PLAT AND THE SURVEY ON WHICH IT IS BASED, WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS," JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS IN 2005, AND INCLUDES ITEMS 2,3,4,7a,8,9,10,11a & 13 OF TABLE A THEREOF. PURSUANT TO THE ACCURACY STANDARDS AS ADOPTED BY ALTA AND NSPS AND IN EFFECT ON THE DATE OF THIS CERTIFICATION, UNDERSIGNED FURTHER CERTIFIES THAT IN MY PROFESSIONAL OPINION, AS A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA, THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY DOES NOT EXCEED THAT WHICH IS SPECIFIED THEREIN.

I HEREBY CERTIFY THAT THIS SURVEY WAS MADE UNDER MY RESPONSIBLE CHARGE AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES. EXCEPT ITEM 1 OF TABLE A WAS NOT A REQUIREMENT OF CLIENT. THEREFORE NO MONUMENTS HAVE BEEN SET BY THIS SURVEYOR. IT IS NOTED THAT THE SUBJECT PROPERTY AS SHOWN IS A LEASE, WHICH IS PART OF A MUCH LARGER PARCEL AS OWNED BY FLORIDA CRUSHED STONE, THEREFORE ADJOINERS AND PARCEL NUMBERS ARE NOT SHOWN.

FIELD WORK DATE: 01/17/08
FIELD SURVEY: Michael F. Feldbusch, PSM

For Inquiries, questions or concerns about this survey contact Inquiries@ussurveyor.com or call 1-800-887-8783 ext. 200

U.S. SURVEYOR®
4929 Riverwind Pointe Drive
Evansville, Indiana 47715
LB NO. 0006899
EB# 6403
"America's Land Surveyor"
1-800- TO SURV

PREPARED FOR:
ARROYO ENERGY INVESTORS, LLP
16345 NORTHCHASE DRIVE
HOUSTON, TX. 77060

PROJECT LOCATION:
HERNANDO COUNTY, STATE OF FLORIDA

PROJECT ADDRESS: 11430 CAMP MINE ROAD BROOKSVILLE, FL

PROJECT TYPE: ALTA/ACSM LAND TITLE SURVEY

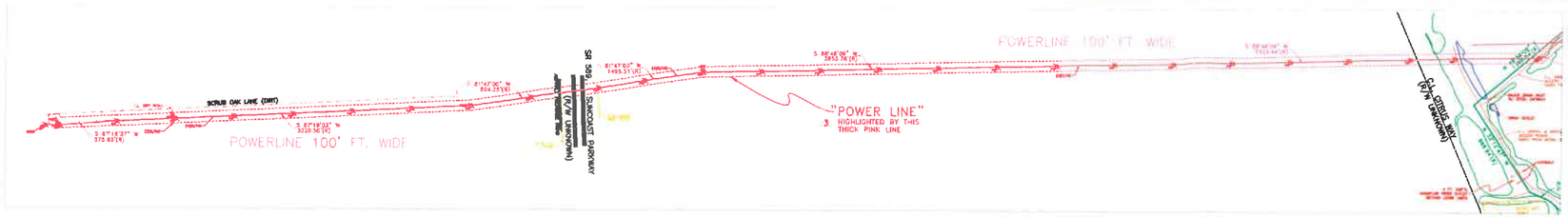
© COPYRIGHT 2008 U.S. SURVEYOR
This drawing, style and format is protected by copyright laws and may not be used in any form or manner whatsoever nor sold or loaned without the written permission of U.S. SURVEYOR.

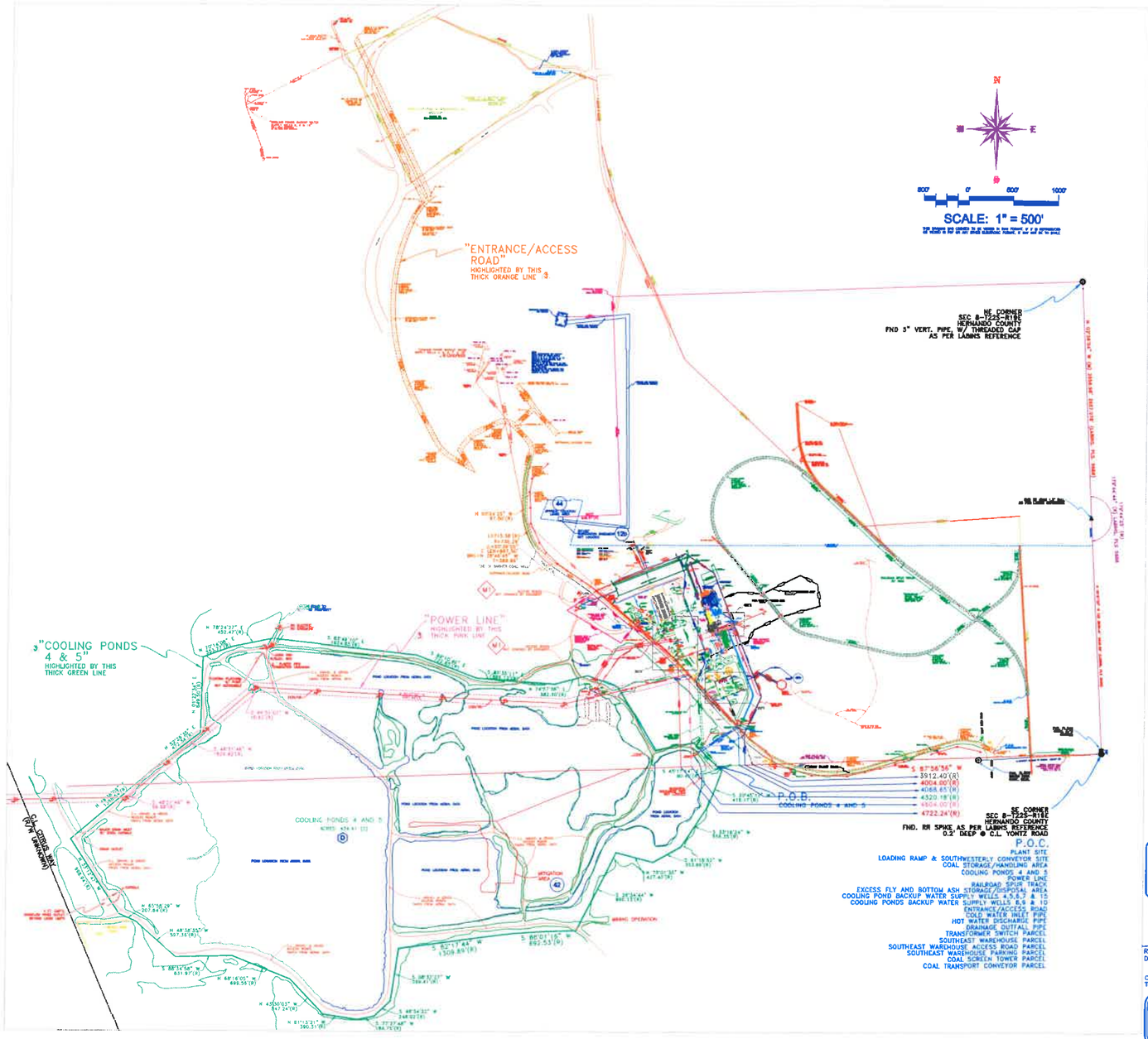
MICHAEL F. FELDBUSCH, PSM
FLORIDA REGISTRATION No. 4615
DATE OF CERTIFICATION 06/30/08

NOT VALID WITHOUT THE ORIGINAL RAISED SEAL AND SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

SHEET 1 OF 5

JOB NUMBER: 8848888.DWG_MF.DW





IMPROVEMENT NOTES

THIS IS A LISTING OF OBSERVED IMPROVEMENTS THAT CROSS DEED LINES. STATEMENT OF OWNERSHIP OR POSSESSION IS NOT THE INTENT OF THIS LISTING

- A1 OFFICE TRAILER LOCATED OUT OF EASEMENT
- B1 WATER TANK NOT IN EASEMENT
- C1 OVERHEAD HOPPER & RAILROAD SHED OUTSIDE OF EASMENT AREA
- D1 4 TRESTLE BRIDGE LIGHTS LOCATED OUTSIDE OF EASEMENT AREA
- E1 RAILROAD TRACKS UTILIZED BY CPL FOR RAILROAD CAR MAINTENANCE ARE LOCATED OUTSIDE OF EASEMENT AREA
- F1 ROOF OVER 8' C.L. FENCE IS LOCATED OUTSIDE OF EASEMENT AREA
- G1 METAL SHED IS LOCATED OUTSIDE OF EASEMENT AREA
- H1 SEMI-TRAILER USED AS OFFICE IS LOCATED OUTSIDE OF EASEMENT AREA
- I1 ACTUAL WELL LOCATIONS DO NOT MATCH AS DESCRIBED OF RECORD
- J1 WELL IN AN ACTIVE INDUSTRIAL AREA
- K1 ON GRADE HOPPER BEYOND LEASE LIMITS
- L1 ACCESS ROAD TO WATER TANK HAS NO LEGALLY DESCRIBED EASEMENT
- M1 ACCESS ROADS NOT COVERED BY EASEMENT
- N1 LEASE LINE RUNS THROUGH SILOS
- O1 OVERHEAD ELECTRIC LINES WITH NO EASEMENT

Figure 3A

811 48 HOURS BEFORE YOU DIG CALL SUNSHINE 1-800-432-4770 IT'S THE LAW IN FLORIDA

IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE ALL UTILITIES, WHETHER SHOWN ON THIS SURVEY OR NOT PRIOR TO COMMENCEMENT OF WORK. THIS SURVEY HAS BEEN PREPARED USING AVAILABLE UTILITY DATA. THIS SURVEYOR DOES NOT MAKE STATEMENTS OF ACCURACY BASED UPON MAPS AND UTILITY LOCATES OF OTHERS.

FLOOD DATA This property is in Zone C of the Flood Insurance Rate Map, Community Panel No. 120110 0175B which has an effective date of APRIL 17, 1984 and IS NOT in a Special Flood Hazard Area. Field surveying was not performed to determine this zone. An elevation certificate may be needed to verify this determination or apply for an amendment from the Federal Emergency Management Agency.

LEGAL DESCRIPTION REVIEWED BY:
INT. DW
INT. PM

RY PE,PLS
DATE REVIEWED: _____

INT. MF
DATE: 2/19/08
FIELD REVIEWED

CERTIFICATION IS ONLY TO THE PARTIES HEREIN NAMED.
THIS SURVEY IS NOT VALID FOR ANY FUTURE TRANSACTIONS OF THIS PROPERTY.

DATE OF ORIGINAL: FEBRUARY 22, 2006
REVISION: _____ DATE: _____, 2008
REVISION: _____ DATE: _____, 2008
REVISION: _____ DATE: _____, 2008

8848888cdwg 6/6/2011 2:44 PM

STANDARD LEGEND

MONUMENT FOUND
MONUMENT SET
P.K. NAIL FOUND
P.K. NAIL SET
FND X MARK
SET X MARK
PLS SPIKE FOUND
PLS SPIKE SET
BENCHMARK
CONC. R/W MARKER
(R) RECORD DATA
(M) MEASURED DATA
(C) CALCULATED DATA
R/W RIGHT OF WAY
BSL BACK SET LINE
RCP REINFORCED CONC PIPE
CMP CORRUGATED METAL PIPE
PVC PLASTIC PIPE
MTL METAL
AGL ABOVE GROUND LEVEL
F.F. FOOTPRINT
L/S LANDSCAPING
TREE

POWERPOLE
GUY WIRE
LIGHT POLE
STREET LIGHT POLE
ELEC. TRANSFORMER
AIR CONDITIONER
BURIED ELECTRIC
O/HEAD ELECTRIC
ELEC. MANHOLE
ELECTRIC METER
WATER LINE
WATER MANHOLE
WATER VALVE
WATER METER
HYDRANT
BACK FLOW PREVENTOR
FIRE DEPT. CONNECTION
BOLLARD
BORE HOLE
MONITORING WELL
MAIL BOX
UNKNOWN MANHOLE
SQUARE METAL LID
FUEL TANK LID
FLAG POLE

SAN.SEWER LINE
SEWER MANHOLE
CLEAN OUT
STORM DRAIN LINE
STORM DRAIN MANHOLE
STORM INLET
CURB INLET
PAY PHONE
TELEPHONE BOX
TELEPHONE MANHOLE
TELEPHONE POLE
TELEPHONE LINE
O/HEAD TELEPHONE
UNDERGROUND TELEPHONE MARKER
CABLE TELEVISION
O/HEAD CABLE
CABLE BOX
UNDERGROUND CABLE MARKER
TRAFFIC RULES
TRAFFIC SIGNAL
TRAFFIC MANHOLE
TRAFFIC SIGNAL BOX
STOP SIGN
SIGN

IMPROVEMENT NOTES

THIS IS A LISTING OF OBSERVED IMPROVEMENTS THAT CROSS DEED LINES. STATEMENT OF OWNERSHIP OR POSSESSION IS NOT THE INTENT OF THIS LISTING.

A1 OFFICE TRAILER LOCATED OUT OF EASEMENT
B1 WATER TANK NOT IN EASEMENT
C1 OVERHEAD HOPPER & RAILROAD SHED OUTSIDE OF EASMENT AREA
D1 4 TRESTLE BRIDGE LIGHTS LOCATED OUTSIDE OF EASEMENT AREA
E1 RAILROAD TRACKS UTILIZED BY CPL FOR RAILROAD CAR MAINTENANCE ARE LOCATED OUTSIDE OF EASEMENT AREA
F1 ROOF OVER 8' C.L. FENCE IS LOCATED OUTSIDE OF EASEMENT AREA
G1 METAL SHED IS LOCATED OUTSIDE OF EASEMENT AREA
H1 SEMI-TRAILER USED AS OFFICE IS LOCATED OUTSIDE OF EASEMENT AREA
I1 ACTUAL WELL LOCATIONS DO NOT MATCH AS DESCRIBED OF RECORD
J1 WELL IN AN ACTIVE INDUSTRIAL AREA
K1 ON GRADE HOPPER BEYOND LEASE LIMITS
L1 ACCESS ROAD TO WATER TANK HAS NO LEGALLY DESCRIBED EASEMENT
M1 ACCESS ROADS NOT COVERED BY EASEMENT
N1 LEASE LINE RUNS THROUGH SILOS
O1 OVERHEAD ELECTRIC LINES WITH NO EASEMENT

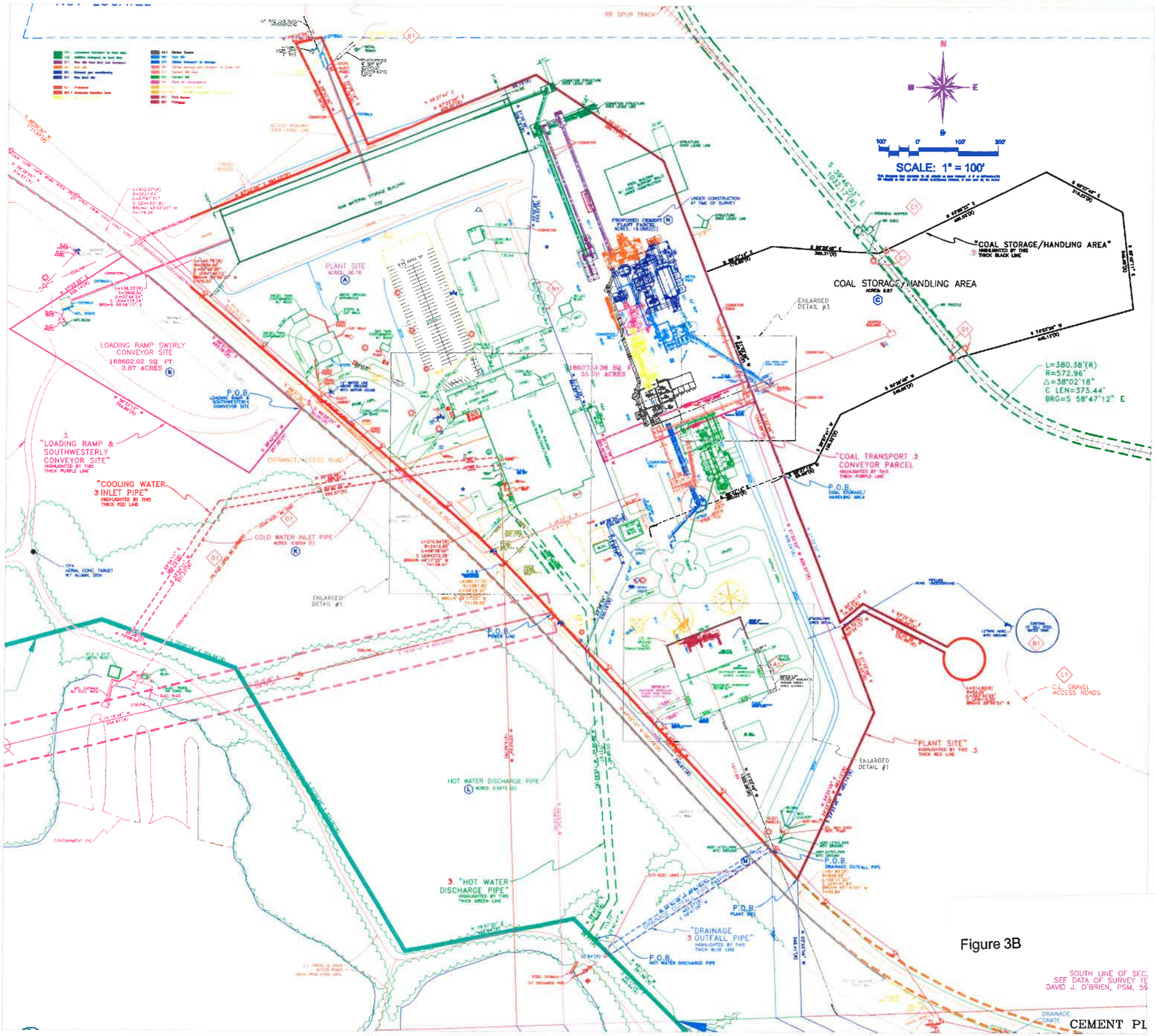


Figure 3B

For Inquiries, questions or concerns about this survey contact Inquiries@ussurveyor or call 1-800-867-8783 ext. 209

U.S. SURVEYOR®
4629 Riverwind Pointe Drive
Evansville, Indiana 47715
LB NO. 0006899
EB# 6403
"America's Land Surveyor"
1-800- TO SURV

PREPARED FOR:
ARROYO ENERGY INVESTORS, LLP
16945 NORTHCHASE DRIVE
HOUSTON, TX 77060

PROJECT LOCATION:
HERNANDO COUNTY, STATE OF FLORIDA

PROJECT ADDRESS:
11430 CAMP MINE ROAD
BROOKSVILLE, FL

PROJECT TYPE:
ALTA/ACSM LAND TITLE SURVEY

MICHAEL F. PELDBUSCH
No. 4615
STATE OF FLORIDA
SURVEYOR AND MAPPER

MICHAEL F. PELDBUSCH, PSM
FLORIDA REGISTRATION No. 4615
DATE OF CERTIFICATION 02/22/06
NOT VALID WITHOUT THE ORIGINAL RAISED SEAL AND SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

© COPYRIGHT 2005 U.S. SURVEYOR
This drawing and survey is the property of U.S. SURVEYOR and shall not be reused in whole or in part for any other project without the written authorization of U.S. SURVEYOR

SHEET 2 OF 5

JOB NUMBER:
6042883.DWG_MF.DW

CERTIFICATION IS ONLY TO THE PARTIES HEREIN NAMED.
THIS SURVEY IS NOT VALID FOR ANY FUTURE TRANSACTIONS OF THIS PROPERTY.

DATE OF ORIGINAL: FEBRUARY 22, 2006
REVISION: ADJACENT PARCEL CAL DATE: AUGUST 4, 2006
REVISION: _____ DATE: _____, 2006
REVISION: _____ DATE: _____, 2006
REVISION: _____ DATE: _____, 2006
ex42883c.dwg 8/8/2011 2:16 PM

LEGAL DESCRIPTION

OVERALL SITE:

PLANT SITE:

A PARCEL OF LAND LOCATED IN SECTIONS 7 AND 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE SOUTH 87°56'56" WEST, ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 1320.82 FEET; THENCE NORTH 00°03'04" WEST, A DISTANCE OF 348.41 FEET TO THE POINT OF BEGINNING; THENCE RUN NORTH 4703'15" WEST, A DISTANCE OF 1907.56 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 09°28'20", A RADIUS OF 2412.65 FEET, A TANGENT OF 139.41 FEET, A CHORD BEARING OF NORTH 46°17'25" WEST, AND A CHORD DISTANCE OF 272.39 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 272.54 FEET; THENCE RUN RADIAL TO SAID CURVE, NORTH 49°33'25" EAST, A DISTANCE OF 60.00 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 02°49'25", A RADIUS OF 2352.65 FEET, A TANGENT OF 115.64 FEET, A CHORD BEARING OF NORTH 59°50'17" WEST, AND A CHORD DISTANCE OF 140.72 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 140.79 FEET; THENCE RUN NORTH 87°23'09" EAST, A DISTANCE OF 1127.12 FEET; THENCE RUN SOUTH 02°36'51" EAST, A DISTANCE OF 306.38 FEET; THENCE RUN NORTH 78°10'04" EAST, A DISTANCE OF 64.90 FEET; THENCE RUN SOUTH 24°00'17" EAST, A DISTANCE OF 294.79 FEET; THENCE RUN NORTH 67°23'09" EAST, A DISTANCE OF 459.50 FEET; THENCE RUN SOUTH 56°15'47" EAST, A DISTANCE OF 1129.12 FEET; THENCE RUN SOUTH 31°22'40" EAST, A DISTANCE OF 1245.81 FEET; THENCE RUN NORTH 36°34'13" EAST, A DISTANCE OF 74.39 FEET; THENCE RUN SOUTH 67°20'36" EAST, A DISTANCE OF 240.64 FEET TO A POINT ON A CURVE CONCAVING THE FOLLOWING ELEMENTS: A DELTA OF 34°34'25", A RADIUS OF 32.50 FEET, A CHORD BEARING OF SOUTH 26°58'34" WEST, AND A CHORD DISTANCE OF 19.50 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 314.82 FEET; THENCE RUN NORTH 63°20'36" WEST, A DISTANCE OF 230.88 FEET; THENCE RUN SOUTH 50°24'13" WEST, A DISTANCE OF 69.52 FEET; THENCE RUN SOUTH 21°22'46" EAST, A DISTANCE OF 226.45 FEET; THENCE RUN SOUTH 24°23'29" WEST, A DISTANCE OF 482.12 FEET TO THE POINT OF BEGINNING.

-AND-

LOADING RAMP AND SOUTHWESTERLY CONVEYOR SITE:

A PARCEL OF LAND LOCATED IN SECTIONS 7 AND 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 1320.82 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 348.41 FEET TO THE POINT OF BEGINNING; THENCE RUN NORTH 47°03'15" WEST, A DISTANCE OF 1907.56 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 09°28'20", A RADIUS OF 2412.65 FEET, A TANGENT OF 139.41 FEET, A CHORD BEARING OF NORTH 46°17'25" WEST, AND A CHORD DISTANCE OF 272.39 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 272.54 FEET; THENCE RUN NORTH 49°33'25" EAST, A DISTANCE OF 50.00 FEET TO THE POINT OF BEGINNING; THENCE RUN SOUTH 40°26'35" WEST, A DISTANCE OF 227.00 FEET; THENCE RUN NORTH 58°23'33" WEST, A DISTANCE OF 734.69 FEET; THENCE RUN NORTH 31°36'27" EAST, A DISTANCE OF 338.14 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 02°49'25", A RADIUS OF 1826.82 FEET TO A POINT ON THE WEST BOUNDARY LINE OF SAID SECTION 7, SAID POINT BEING NORTH 00°36'14" WEST A DISTANCE OF 66.82 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE CONTINUE SOUTH 48°51'46" WEST, A DISTANCE OF 58.68 FEET INTO SECTION 12, TOWNSHIP 22 SOUTH, RANGE 18 EAST; THENCE RUN SOUTH 88°46'58" WEST, A DISTANCE OF 5333.44 FEET TO A POINT WHICH LIES NORTH, A DISTANCE OF 59.82 FEET, FROM THE SOUTHWEST CORNER OF SAID SECTION 12; THENCE CONTINUE INTO SECTION 11, TOWNSHIP 22 SOUTH, RANGE 18 EAST, SOUTH 89°46'06" WEST, A DISTANCE OF 2653.76 FEET; THENCE RUN SOUTH 81°47'00" WEST, A DISTANCE OF 1495.31 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 11; THENCE RUN INTO SECTION 14, TOWNSHIP 22 SOUTH, RANGE 18 EAST, SOUTH 81°47'00" WEST, A DISTANCE OF 804.25 FEET; THENCE RUN SOUTH 87°19'07" WEST, A DISTANCE OF 1130.19 FEET TO A POINT SOUTH, A DISTANCE OF 61.04 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 14; THENCE CONTINUE INTO SECTION 15, TOWNSHIP 22 SOUTH, RANGE 18 EAST, SOUTH 87°19'07" WEST, A DISTANCE OF 2320.50 FEET; THENCE RUN SOUTH 87°18'35" WEST, A DISTANCE OF 579.85 FEET; THENCE RUN NORTH 29°32'44" WEST, A DISTANCE OF 36.52 FEET; THENCE RUN SOUTH 87°00'50" WEST, A DISTANCE OF 67.96 FEET TO THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 14, AND SOUTH 02°37'35" EAST, A DISTANCE OF 84.93 FEET FROM THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 14.

LEGAL DESCRIPTION (continued)

-AND-

RAILROAD SPUR TRACK:

A STRIP OF PARCEL OF LAND FOR A RAILROAD SPUR TRACK IN SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, SAID STRIP BEING 15 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE SOUTHEAST CORNER OF SAID, SECTION RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 818.26 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 89.67 FEET TO A POINT OF BEGINNING OF CENTERLINE OF RAILROAD MAIN TRACK; ALSO BEING THE POINT OF CURVATURE OF A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 02°07'14", A RADIUS OF 932.21 FEET, A CHORD BEARING OF NORTH 28°30'22" WEST, AND A CHORD DISTANCE OF 172.24 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 172.47 FEET; THENCE RUN NORTH 33°33'59" WEST, A DISTANCE OF 1253.77 FEET; THENCE RUN NORTH 33°34'11" WEST, A DISTANCE OF 377.27 FEET TO THE NORTHERLY BOUNDARY OF SAID SECTION 8, AND THE POINT OF TERMINUS; THENCE CONTINUE ALONG SAID NORTHERLY BOUNDARY, A DISTANCE OF 20.59 FEET; THENCE RUN NORTH 47°56'05" WEST, A DISTANCE OF 1334.16 FEET; THENCE RUN NORTH 33°34'11" WEST, A DISTANCE OF 1253.77 FEET; THENCE RUN NORTH 48°14'02" WEST, A DISTANCE OF 407.83 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 17°32'22", A RADIUS OF 614.67 FEET, A TANGENT OF 94778 FEET, A CHORD BEARING OF SOUTH 44°30'09" WEST, AND A CHORD DISTANCE OF 1226.74 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1032.17 FEET TO A POINT ON A CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 38°11'38", A RADIUS OF 498.22 FEET, A TANGENT OF 173.38 FEET, A CHORD BEARING OF SOUTH 71°49'40" WEST, AND A CHORD DISTANCE OF 334.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 340.81 FEET; THENCE RUN SOUTH 72°45'05" WEST, A DISTANCE OF 928.46 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTH, CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 54°49'56", A RADIUS OF 1432.39 FEET, A TANGENT OF 824.21 FEET, A CHORD BEARING OF SOUTH 45°40'07" WEST, AND A CHORD DISTANCE OF 1318.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1369.82 FEET TO A POINT ON A COMPOUND CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 04°21'29", A RADIUS OF 809.95 FEET, A CHORD BEARING OF NORTH 45°14'05" WEST, AND A CHORD DISTANCE OF 61.64 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 61.65 FEET; THENCE RUN NORTH 47°03'15" WEST, A DISTANCE OF 1907.56 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 09°28'20", A RADIUS OF 2387.65 FEET, A TANGENT OF 139.00 FEET, A CHORD BEARING OF NORTH 46°17'25" WEST, AND A CHORD DISTANCE OF 263.93 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 269.71 FEET; THENCE RUN NORTH 49°33'25" EAST, A DISTANCE OF 905.11 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 37°07'37", A RADIUS OF 1828.82 FEET TO A POINT OF TERMINUS OF THIS SPUR TRACK ON THE CENTERLINE OF RAILROAD MAIN TRACK.

-AND-

EXCESS FLY AND BOTTOM ASH STORAGE/DISPOSAL AREA:

A PARCEL OF LAND LOCATED IN SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH LINE OF SAID SECTION 8, A DISTANCE OF 818.26 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 89.67 FEET; THENCE RUN NORTH 33°34'11" WEST, A DISTANCE OF 1359.58 FEET; THENCE RUN NORTH 47°56'05" WEST, A DISTANCE OF 1334.16 FEET; THENCE RUN NORTH 48°14'02" WEST, A DISTANCE OF 407.83 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 17°32'22", A RADIUS OF 614.67 FEET, A TANGENT OF 94778 FEET, A CHORD BEARING OF SOUTH 44°30'09" WEST, AND A CHORD DISTANCE OF 1226.74 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1032.17 FEET TO A POINT ON A CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 38°11'38", A RADIUS OF 498.22 FEET, A TANGENT OF 173.38 FEET, A CHORD BEARING OF SOUTH 71°49'40" WEST, AND A CHORD DISTANCE OF 334.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 340.81 FEET; THENCE RUN SOUTH 72°45'05" WEST, A DISTANCE OF 928.46 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTH, CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 54°49'56", A RADIUS OF 1432.39 FEET, A TANGENT OF 824.21 FEET, A CHORD BEARING OF SOUTH 45°40'07" WEST, AND A CHORD DISTANCE OF 1318.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1369.82 FEET TO A POINT ON A COMPOUND CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 04°21'29", A RADIUS OF 809.95 FEET, A CHORD BEARING OF NORTH 45°14'05" WEST, AND A CHORD DISTANCE OF 61.64 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 61.65 FEET; THENCE RUN NORTH 47°03'15" WEST, A DISTANCE OF 1907.56 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 09°28'20", A RADIUS OF 2387.65 FEET, A TANGENT OF 139.00 FEET, A CHORD BEARING OF NORTH 46°17'25" WEST, AND A CHORD DISTANCE OF 263.93 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 269.71 FEET; THENCE RUN NORTH 49°33'25" EAST, A DISTANCE OF 905.11 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 37°07'37", A RADIUS OF 1828.82 FEET TO A POINT OF TERMINUS OF THIS SPUR TRACK ON THE CENTERLINE OF RAILROAD MAIN TRACK.

-AND-

COAL STORAGE/HANDLING AREA:

A PARCEL OF LAND LOCATED IN SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 1320.82 FEET; THENCE RUN NORTH 00°03'04" WEST, ALONG THE PLANT BASE LINE, A DISTANCE OF 1320.26 FEET; THENCE RUN NORTH 00°57'41" EAST, A DISTANCE OF 360.02 FEET TO THE POINT OF BEGINNING; THENCE RUN NORTH 21°22'46" WEST, A LINE PARALLEL TO SAID PLANT BASE LINE, A DISTANCE OF 546.00 FEET; THENCE RUN NORTH 68°37'14" EAST, A DISTANCE OF 200.00 FEET; THENCE RUN SOUTH 89°25'48" EAST, A DISTANCE OF 269.21 FEET TO A POINT ON THE CENTERLINE OF THE RAILROAD SPUR TRACK; THENCE RUN NORTH 83°59'27" EAST, A DISTANCE OF 490.83 FEET; THENCE RUN SOUTH 62°27'45" EAST, A DISTANCE OF 216.23 FEET; THENCE RUN SOUTH 66°47'11" EAST, A DISTANCE OF 245.05 FEET; THENCE RUN SOUTH 74°23'20" WEST, A DISTANCE OF 445.12 FEET TO A POINT ON THE CENTERLINE OF RAILROAD SPUR TRACK; THENCE RUN SOUTH 64°28'40" WEST, A DISTANCE OF 340.66 FEET; THENCE RUN NORTH 25°37'41" WEST, A DISTANCE OF 68.00 FEET; THENCE RUN SOUTH 68°27'14" WEST, A DISTANCE OF 68.00 FEET TO THE POINT OF BEGINNING.

-AND-

COOLING PONDS 4 AND 5:

A STRIP OF PARCEL OF LAND BY WATER, LOCATED WITHIN THE FOLLOWING HERNANDO COUNTY, FLORIDA SECTIONS:

THE NORTHWEST 1/4 OF SECTION 17, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE SOUTHERLY 1/4 OF SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE SOUTH SECTION 7, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE NORTH 1/2 OF SECTION 18, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 18 EAST; AND THE SOUTHEAST 1/4 OF SECTION 12 TOWNSHIP 22 SOUTH, RANGE 18 EAST, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 1320.82 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 1320.26 FEET; THENCE RUN NORTH 00°57'41" EAST, A DISTANCE OF 360.02 FEET; THENCE RUN NORTH 21°22'46" WEST, A DISTANCE OF 546.00 FEET; THENCE RUN NORTH 68°37'14" EAST, A DISTANCE OF 200.00 FEET; THENCE RUN SOUTH 89°25'48" EAST, A DISTANCE OF 269.21 FEET; THENCE RUN NORTH 83°59'27" EAST, A DISTANCE OF 490.83 FEET; THENCE RUN SOUTH 62°27'45" EAST, A DISTANCE OF 216.23 FEET; THENCE RUN SOUTH 66°47'11" EAST, A DISTANCE OF 245.05 FEET; THENCE RUN SOUTH 74°23'20" WEST, A DISTANCE OF 445.12 FEET; THENCE RUN SOUTH 64°28'40" WEST, A DISTANCE OF 340.66 FEET; THENCE RUN NORTH 25°37'41" WEST, A DISTANCE OF 68.00 FEET; THENCE RUN SOUTH 68°27'14" WEST, A DISTANCE OF 68.00 FEET TO THE POINT OF BEGINNING.

-AND-

COOLING PONDS 6 AND 7:

A STRIP OF PARCEL OF LAND BY WATER, LOCATED WITHIN THE FOLLOWING HERNANDO COUNTY, FLORIDA SECTIONS:

THE NORTHWEST 1/4 OF SECTION 17, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE SOUTHERLY 1/4 OF SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE SOUTH SECTION 7, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE NORTH 1/2 OF SECTION 18, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 22 SOUTH, RANGE 18 EAST; AND THE SOUTHEAST 1/4 OF SECTION 12 TOWNSHIP 22 SOUTH, RANGE 18 EAST, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 818.26 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 89.67 FEET; THENCE RUN NORTH 33°34'11" WEST, A DISTANCE OF 1359.58 FEET; THENCE RUN NORTH 47°56'05" WEST, A DISTANCE OF 1334.16 FEET; THENCE RUN NORTH 48°14'02" WEST, A DISTANCE OF 407.83 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 17°32'22", A RADIUS OF 614.67 FEET, A TANGENT OF 94778 FEET, A CHORD BEARING OF SOUTH 44°30'09" WEST, AND A CHORD DISTANCE OF 1226.74 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1032.17 FEET TO A POINT ON A CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 38°11'38", A RADIUS OF 498.22 FEET, A TANGENT OF 173.38 FEET, A CHORD BEARING OF SOUTH 71°49'40" WEST, AND A CHORD DISTANCE OF 334.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 340.81 FEET; THENCE RUN SOUTH 72°45'05" WEST, A DISTANCE OF 928.46 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTH, CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 54°49'56", A RADIUS OF 1432.39 FEET, A TANGENT OF 824.21 FEET, A CHORD BEARING OF SOUTH 45°40'07" WEST, AND A CHORD DISTANCE OF 1318.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1369.82 FEET TO A POINT ON A COMPOUND CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 04°21'29", A RADIUS OF 809.95 FEET, A CHORD BEARING OF NORTH 45°14'05" WEST, AND A CHORD DISTANCE OF 61.64 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 61.65 FEET; THENCE RUN NORTH 47°03'15" WEST, A DISTANCE OF 1907.56 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 09°28'20", A RADIUS OF 2387.65 FEET, A TANGENT OF 139.00 FEET, A CHORD BEARING OF NORTH 46°17'25" WEST, AND A CHORD DISTANCE OF 263.93 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 269.71 FEET; THENCE RUN NORTH 49°33'25" EAST, A DISTANCE OF 905.11 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 37°07'37", A RADIUS OF 1828.82 FEET TO A POINT OF TERMINUS OF THIS SPUR TRACK ON THE CENTERLINE OF RAILROAD MAIN TRACK.

-AND-

COOLING PONDS BACKUP WATER SUPPLY WELLS 8, 9 AND 10:

WATER WELL PADS OR PARCELS OF LAND AND RAILROAD PUMPS AND FACILITIES DESIGNATED AS FCS WELLS 8, 9 AND 10, EACH OF THE PARCELS BEING A CIRCLE AND HAVING A RADIUS OF 12.0 FEET AND EACH OF THE PUMPS AND FACILITIES BEING HEREINAFTER DESCRIBED:

COMMENCE AT THE SOUTHEAST CORNER OF SECTION 8, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 818.26 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 89.67 FEET; THENCE RUN NORTH 33°34'11" WEST, A DISTANCE OF 1359.58 FEET; THENCE RUN NORTH 47°56'05" WEST, A DISTANCE OF 1334.16 FEET; THENCE RUN NORTH 48°14'02" WEST, A DISTANCE OF 407.83 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 17°32'22", A RADIUS OF 614.67 FEET, A TANGENT OF 94778 FEET, A CHORD BEARING OF SOUTH 44°30'09" WEST, AND A CHORD DISTANCE OF 1226.74 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1032.17 FEET TO A POINT ON A CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 38°11'38", A RADIUS OF 498.22 FEET, A TANGENT OF 173.38 FEET, A CHORD BEARING OF SOUTH 71°49'40" WEST, AND A CHORD DISTANCE OF 334.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 340.81 FEET; THENCE RUN SOUTH 72°45'05" WEST, A DISTANCE OF 928.46 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTH, CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 54°49'56", A RADIUS OF 1432.39 FEET, A TANGENT OF 824.21 FEET, A CHORD BEARING OF SOUTH 45°40'07" WEST, AND A CHORD DISTANCE OF 1318.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1369.82 FEET TO A POINT ON A COMPOUND CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 04°21'29", A RADIUS OF 809.95 FEET, A CHORD BEARING OF NORTH 45°14'05" WEST, AND A CHORD DISTANCE OF 61.64 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 61.65 FEET; THENCE RUN NORTH 47°03'15" WEST, A DISTANCE OF 1907.56 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 09°28'20", A RADIUS OF 2387.65 FEET, A TANGENT OF 139.00 FEET, A CHORD BEARING OF NORTH 46°17'25" WEST, AND A CHORD DISTANCE OF 263.93 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 269.71 FEET; THENCE RUN NORTH 49°33'25" EAST, A DISTANCE OF 905.11 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWEST CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 37°07'37", A RADIUS OF 1828.82 FEET TO A POINT OF TERMINUS OF THIS SPUR TRACK ON THE CENTERLINE OF RAILROAD MAIN TRACK.

-AND-

ENTRANCE/ACCESS ROAD:

A STRIP OR PARCEL OF LAND EXTENDING ACROSS SECTIONS (BY ORDER) 8, 17, 7 AND 6, TOWNSHIP 22 SOUTH, RANGE 19 EAST, HERNANDO COUNTY, FLORIDA, AND LYING 25 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 1207.02 FEET; THENCE RUN NORTH 00°03'04" WEST, A DISTANCE OF 89.46 FEET TO THE INTERSECTION OF THE CENTERLINE OF YONTZ ROAD AND COBB ROAD, ALSO BEING THE POINT OF BEGINNING; THENCE RUN NORTH 68°03'14" WEST, A DISTANCE OF 177.62 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 30°11'38", A RADIUS OF 498.22 FEET, A TANGENT OF 173.38 FEET, A CHORD BEARING OF NORTH 83°08'53" WEST, AND A CHORD DISTANCE OF 334.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 340.81 FEET; THENCE RUN SOUTH 72°45'05" WEST, A DISTANCE OF 928.46 FEET TO A POINT ON A CURVE CONCAVE TO THE NORTH CONTAINING THE FOLLOWING ELEMENTS: A DELTA OF 54°49'56", A RADIUS OF 1432.39 FEET, A TANGENT OF 824.21 FEET, A CHORD BEARING OF NORTH 45°40'07" EAST, AND A CHORD DISTANCE OF 1318.21 FEET; THENCE RUN ALONG THE ARC OF SAID CURVE, A DISTANCE OF 1369.82 FEET; THENCE RUN NORTH 17°32'54" EAST, A DISTANCE OF 849.50 FEET; THENCE RUN NORTH 72°27'06" WEST, A DISTANCE OF 453.77 FEET; THENCE RUN NORTH 17°32'54" EAST, A DISTANCE OF 1634.65 FEET; THENCE RUN SOUTH 69°10'40" EAST, A DISTANCE OF 723.55 FEET; THENCE RUN SOUTH 85°30'11" EAST, A DISTANCE OF 886.12 FEET; THENCE RUN NORTH 74°57'58" EAST, A DISTANCE OF 262.30 FEET; THENCE RUN SOUTH 70°09'04" EAST, A DISTANCE OF 548.99 FEET; THENCE RUN SOUTH 31°20'26" EAST, A DISTANCE OF 834.00 FEET; THENCE RUN NORTH 78°57'06" EAST, A DISTANCE OF 432.84 FEET; THENCE RUN SOUTH 45°17'47" EAST, A DISTANCE OF 445.94 FEET TO THE POINT OF BEGINNING.

-AND-

POWER LINE:

A STRIP OR PARCEL OF LAND EXTENDING WESTERLY ACROSS PARTS OF (IN ORDER) SECTION 8 AND 7, TOWNSHIP 22 SOUTH, RANGE 19 EAST, AND SECTION 12, TOWNSHIP 22 SOUTH, RANGE 18 EAST, HERNANDO COUNTY, FLORIDA, SAID STRIP OF LAND LYING 50 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 8, A RAILROAD SPIKE IN THE CENTERLINE OF YONTZ ROAD; THENCE RUN SOUTH 87°56'56" WEST, ALONG THE SOUTH BOUNDARY LINE OF SAID SECTION 8, A DISTANCE OF 1538.55 FEET TO THE POINT OF BEGINNING; ALSO BEING THE POINT OF INTERSECTION OF THE CENTERLINE OF THE EXISTING POWER LINE WITH THE PLANT SITE; THENCE RUN SOUTH 26°06'14" WEST, ALONG THE CENTERLINE OF SAID POWER LINE, A DISTANCE OF 853.03 FEET; THENCE RUN SOUTH 19°19'18" WEST, A DISTANCE OF 208.78 FEET TO A POINT ON THE WEST LINE OF SAID SECTION 8, SAID POINT BEING NORTH 02°59'21" WEST, A DISTANCE OF 802.41 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 8; THENCE CONTINUE SOUTH 19°19'48" WEST, A DISTANCE OF 2055.85 FEET INTO SECTION 7, TOWNSHIP 22 SOUTH, RANGE 19 EAST; THENCE RUN NORTH 87°37'38" WEST, A DISTANCE OF 3481.84 FEET; THENCE RUN SOUTH 48°51'46" WEST, A DISTANCE OF 1826.82 FEET TO A POINT ON THE WEST BOUNDARY LINE OF SAID SECTION 7, SAID POINT BEING NORTH 00°36'14" WEST A DISTANCE OF 66.82 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE CONTINUE SOUTH 48°51'46" WEST, A DISTANCE OF 58.68 FEET INTO SECTION 12, TOWNSHIP 22 SOUTH, RANGE 18 EAST; THENCE RUN SOUTH 88°46'58" WEST, A DISTANCE OF 5333.44 FEET TO A POINT WHICH LIES NORTH, A DISTANCE OF 59.82 FEET, FROM THE SOUTHWEST CORNER OF SAID SECTION 12; THENCE CONTINUE INTO SECTION 11, TOWNSHIP 22 SOUTH, RANGE 18 EAST, SOUTH 89°46'06" WEST, A DISTANCE OF 2653.76 FEET; THENCE RUN SOUTH 81°47'00" WEST, A DISTANCE OF 1495.31 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SAID SECTION 11; THENCE RUN INTO SECTION 14, TOWNSHIP 22 SOUTH, RANGE 18 EAST, SOUTH 81°47'00" WEST, A DISTANCE OF 804.25 FEET; THENCE RUN SOUTH 87°19'07" WEST, A DISTANCE OF 1130.19 FEET TO A POINT SOUTH, A DISTANCE OF 61.04 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 14; THENCE CONTINUE INTO SECTION 15, TOWNSHIP 22 SOUTH, RANGE 18 EAST, SOUTH 87°19'07" WEST, A DISTANCE OF 2320.50 FEET; THENCE RUN SOUTH 87°18'35" WEST, A DISTANCE OF 579.85 FEET; THENCE RUN NORTH 29°32'44" WEST, A DISTANCE OF 36.52 FEET; THENCE RUN SOUTH 87°00'50" WEST, A DISTANCE OF 67.96 FEET TO THE INTERSECTION OF THE EAST RIGHT-OF-WAY LINE OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 14, AND SOUTH 02°37'35" EAST, A DISTANCE OF 84.93 FEET FROM THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 14.

LEGAL DESCRIPTION (continued)

-AND-

COLD WATER INLET PIPE:

A STRIP OR PARCEL OF LAND CONTA

2

CLOSURE PLAN

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

Appendix 2

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: November 16, 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

307-18-07

Table of Contents

1.0 Notification and Closing Process.....1
2.0 Quantity of Alternative Fuel Material (AFM).....1
3.0 Closure Scheduling.....1
4.0 Closure Cost Estimates.....3
5.0 Summary of Closure Plan.....5
6.0 Financial Assurance.....5

ATTACHMENTS

Attachment A – AFM Removal Closing Cost Estimate

Attachment B – Professional Engineering Estimate

Attachment C - FDEP Closure Cost Estimating Form

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 5,200 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 35 day's supply based on 5,200 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 tons/day x 35 days = 5,200 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 $289,489 plus the 10 percent contingency estimate of $28,949.80 for a total of $318,447.80. The closing estimate documents 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 5,200 tons. A cost estimate for the transport and disposal at a Class I waste facility of 5,200 tons of AFM based on the CES estimate (see Attachment A) is as follows:

- 5,200 tons @ approximately $55 ton = $286,000

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 Operators[2]. The cost for a backhoe (10') was obtained on-line from Discount Rentals in Tampa[3]. 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 $318,447.80. 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.*

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

ATTACHMENTS

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

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

A

AFM REMOVAL

ESTIMATE



Creative Environmental Solutions, Inc.
Geologists ▸ Engineers ▸ Environmental Scientists
700 DeSoto Avenue • Brooksville, FL • 34601

October 26, 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 5,200 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 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

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

B

PE COST ESTIMATE



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

307-18-07
August 6, 2018

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.

MRL/tlg

C

FINANCIAL ASSURANCE

COST ESTIMATE FORM



Print Form | Reset Form

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: _____
Permit Application or Consent Order No.: 40778 Expiration Date: _____
Facility Address: 10311 Cement Plant Road; Brooksville, FL 34601
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 ' 56 "
Coordinate Method: Degrees/Minutes/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: (Check all that apply) ☐ Class I ☐ Class III ☐ C&D Debris Disposal ☐ 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 32502-5794
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
2295 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
561-681-6600

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 ajustment 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 Deflatory 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: To Be Approved

Latest Department Approved **Closing Cost** Estimate:		Current Year Inflation Factor, ***e.g. 1.02***		Inflation Adjusted Closing Cost Estimate:
_____	×	_____	=	_____

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

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:
_____	×	_____	=	_____
Number of Years of Long Term Care Remaining:			×	_____
Inflation Adjusted Long-Term Care Cost Estimate:			=	_____

Signature by: ☑ **Owner/Operator** ☒ **Engineer** (check what applies)

Signature

Maxwell R. Lee, Ph.D., P.E.
Name & Title

11/15/18
Date

352-377-5822
Telephone Number

P.O. Box 5127
Address

Gainesville, FL 32627-5127
City, State, Zip Code

mlee@kooglerassociates.com
E-Mail Address

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 ex
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	$770.00	$770.00
Piping	LF			
Ditches	LF			
Berms	LF			
Control Structures	EA			
Other (explain)				
			Subtotal Stormwater Control System:	$770.00

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	$0.00	
			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)				
			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	$0.00	
Certified Engineering Drawings	LS	1	$0.00	
NSPS/Title V Air Permit	LS	1	$0.00	
Final Survey	LS	1	$0.00	
Certification of Closure	LS	1	$0.00	
Other (explain) Disposal & Hauling of AFM (CES estimate)		1	$286,000.00	$286,000.00
			Subtotal Engineering:	$286,000.00

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	Contract Management		Quality Assurance		
P.E. Supervisor	4	$225.0(	4	$225.0(	$1,800.00
On-Site Engineer					
Office Engineer					
On-Site Technician					
Other (explain) Clean-up Tech	80	$11.60			$928.00

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1		
			Subtotal Professional Services:	$2,728.00

		Subtotal of 1-11 Above:	$289,498.00
12. Contingency	10 % of Subtotal of 1-11 Above		$28,949.80
		Subtotal Contingency:	$28,949.80
		Estimated Closing Cost Subtotal:	$318,447.80

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

TOTAL ESTIMATED CLOSING COSTS ($): $318,447.80

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, 0 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				
Maintenance				
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)				
Impoundments				
Liner Repair	SY			
Sludge Removal	CY			
Aeration Systems				
Floating Aerators	EA			
Spray Aerators	EA			
Disposal				
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	1	$0.00	
			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	1	$0.00	
			Subtotal Storm Water Management System Maintenance:	
11. Security System Maintenance				
Fences	LS	1	$0.00	
Gate(s)	EA			
Sign(s)	EA			
			Subtotal Security System Maintenance:	

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	1	$0.00	
			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	$0.00	
		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)

11/13/18
Date

58091
Florida Registration Number

(please affix seal)

MAXWELL R. LEE LICENSE No. 58091 STATE OF FLORIDA PROFESSIONAL ENGINEER

P.O. 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

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