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JAN 18 2013

DIVISION OF AIR  
RESOURCE MANAGEMENT



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

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

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

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

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

**To ensure accuracy, please see form instructions.**

#### Identification of Facility

1. Facility Owner/Company Name: <b>CEMEX Construction Materials Florida, LLC</b>	
2. Site Name: <b>Brooksville South Cement Plant</b>	
3. Facility Identification Number: <b>0530021</b>	
4. Facility Location... Street Address or Other Locator: <b>10311 Cement Plant Road</b> City: <b>Brooksville</b> County: <b>Hernando</b> Zip Code: <b>34601</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>John B. Koogler, Ph.D., P.E</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>Koogler and Associates, Inc.</b> Street Address: <b>4014 NW 13<sup>th</sup> Street</b> City: <b>Gainesville</b> State: <b>Florida</b> Zip Code: <b>32609</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(352)- 377- 5822</b> ext. <b>18</b> Fax: <b>(352)-377-7158</b>	
4. Application Contact E-mail Address: <b>jkoogler@kooglerassociates.com</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):

## APPLICATION INFORMATION

### Purpose of Application

**This application for air permit is being submitted to obtain: (Check one)**

#### **Air Construction Permit**

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

#### **Air Operation Permit**

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

This application is for a revision to the TV permit for existing CEMEX Portland cement Kiln No. 1 and Kiln No. 2 to define the facility separate from the Central Power and Lime power plant. The two facilities (the cement plant and the power plant) had been permitted as a single facility with Facility ID Number 0530021 since originally permitted in the mid-1980s. Most recently they operated under Permit No. 0530021-021-AV (revised by -025 and -029-AV), effective 07/18/2011.

Recently (01/24/2012) FDEP issued Permit 0530380-001-AC to Florida Power Development, LLC (FPD) to convert the power plant to a stand-alone biomass fired power plant, and later (09/04/2012) issued Permits 0530021-043 and 044-AC to CEMEX for the stand-alone operation of Kilns No. 1 and No. 2. This application is for a TV permit for CEMEX Kilns No. 1 and No. 2 that incorporates the conditions of Permits 0530021-043 and 044-AC and the following:

## APPLICATION INFORMATION

### Application Comment (cont.)

0530021-015-AC – Addition of TIMS on Kiln No. 2 to allow firing of TDF at kiln inlet,  
0530021-016-AC – Addition of TIMS on Kiln No. 1 to allow firing of TDF at kiln inlet,  
0530021-018-AC – Kiln No. 2 “ As Built” as applicable  
0530021-022 and 026-AC – Installation of temperature quench in downcomer of Kiln No. 1,  
0530021-030-AC – Addition of EU-063; a dust collector on a clinker belt of Kiln No. 1,  
0530021-033-AC – Production rate for Kiln No. 2 and restatement of PM emission limits for  
the No. 2 Finish Mill, and  
0530021-039-AC – The use of alternative fuels in Kiln No. 2 and the associated AF handling  
infrastructure.

Also note that associated with Permit 0530021-043-AC, a new stack may be constructed for Kiln No. 1 replacing the stack the kiln previously shared with the CPL power plant; the Kiln No. 1/CPL baghouse may be replaced with a smaller baghouse sized for Kiln No. 1; and the duct from the Kiln No. 1 Clinker Cooler to the Kiln No. 1/Clinker Cooler baghouse will be rerouted so that the duct no longer passes thru the CPL Power Plant.

The potential replacement of the Kiln No. 1 stack was addressed in the AC Application for Kilns No. 1 and No. 2. Likewise, the potential replacement/modification of the Kiln No. 1/CPL Power Plant baghouse with a baghouse sized for Kiln No. 1 and the Kiln No. 1 Clinker Cooler was addressed in that AC Application. Decisions have not been made on either of these projects at this time.

The Kiln No. 1 Clinker Cooler duct rerouting is a structural project required by the separation of Kiln No. 1 and the CPL Power Plant and should require no permitting. The Department was notified of this project in the Kiln No. 1/Kiln No. 2 AC application. This project has, or will be completed during the modifications to the CPL Power Plant.

## APPLICATION INFORMATION

### Scope of Application

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Processing Fee</b>
<b>Brooksville South Cement Plant Kiln No. 1</b>			
001/D-75	Filter Dust Bin with Baghouse		NA
002/D-67	Fly Ash/Equilibrium Catalyst Bin with Baghouse		
004/F-14	Raw Meal Transfer with Baghouse		
006/G-12 (A &B)	Two Blend Silos with Baghouse		
007/H-15	Kiln Feed Surge Bin with Baghouse		
008/S-04	Clinker Receiving/Handling System		
009/K-07 & L-03	Clinker Cooler Discharge with Baghouse		
010/L06 to L05 & L07	Clinker Storage Silos with Baghouse		
011/L-08	Gypsum and Limestone Bins with Baghouse		
012/M-08	Silo Discharge with Baghouse		
013/N-13	Finish Mill with Baghouse		
014/Q-17	A-side Cement Storage Silos Nos. 1 & 2 Discharge System with Baghouse		
015/Q-15	Cement Storage Silos Nos. 1 & 2 with Baghouse		
019/M-05	Finish Mill feed belt with Baghouse		
020	Cement Kiln-I, In-line Kiln/Raw Mill and Clinker Cooler I with Baghouse		
021/Q-18	B-side Cement Storage Silos 1,2 & 3 with Discharge system with Baghouse		
<b>Note: EU-017, Iron ore Bin and baghouse was removed from service in 2009</b>			

**APPLICATION INFORMATION**

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Processing Fee</b>
022/Z-15	Cement Storage Silo # 3 with Baghouse		NA
023	Cement Storage Silo # 4 with Truck Loadout system with Baghouse		
024/Z-18	Cement Storage silo and Railcar Loadout system with Baghouses		
<b>Brooksville South Cement Plant Kiln Nos. 1 and 2 – Coal Yard &amp; Fugitive Emissions</b>			
042	Coal Receiving, Handling and Transfer System (Fugitives)		NA
Not Numbered	Facility wide Fugitive Emissions		
<b>Brooksville South Cement Plant Kiln No. 2</b>			
044	Kiln No. 2/Preheater/Precalciner/Clinker Cooler/Air Heater		NA
Not Numbered	Alternative Fuel Handling and Processing		
045	Filter Dust		
046	Raw Meal Transport		
047	Kiln Feed Transport		
048	Clinker Transport		
050	Clinker Storage		
051	Finish Mill Collecting Bin		
052	Finish Mill		
054	Bucket Elevator		

**APPLICATION INFORMATION**

057	Cement Transport		
058	Cement Loadout Bin		NA
059	Cement Loadout Bin		
060	Coal Mill		
061	Fine Coal Bin		
062	Packing Plant		
063	Kiln No. 1 Clinker Belt Dust Control		

**Application Processing Fee**

Check one:  Attached - Amount: \$ \_\_\_\_\_  Not Applicable

## APPLICATION INFORMATION

### Owner/Authorized Representative Statement

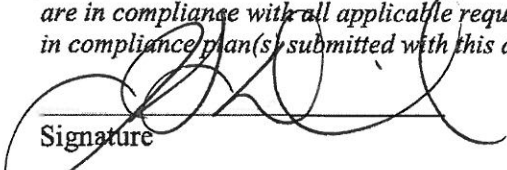
Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :	NA
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address City State: Zip Code	
3. Owner/Authorized Representative Telephone Numbers... Telephone:	
4. Owner/Authorized Representative E-mail Address:	
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>	
_____ Signature	_____ Date

## APPLICATION INFORMATION

### Application Responsible Official Certification

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

1. Application Responsible Official Name: <b>Jim Daniel ,Cement Plant Manager</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>CEMEX Construction Materials Florida LLC</b> Street Address: <b>10311 Cement Plant Road</b> City: <b>Brooksville</b> State: <b>Florida</b> Zip Code: <b>34601</b>
4. Application Responsible Official Telephone Numbers... Telephone: <b>(352) 799-7881</b> Fax: <b>(352) 540 -4794</b>
5. Application Responsible Official E-mail Address: <b>jdaniel@cemexusa.com</b>
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature  Date <u>12/17/12</u>



# APPLICATION INFORMATION

## Professional Engineer Certification

1. Professional Engineer Name: <b>John B. Koogler, Ph.D., P.E</b> Registration Number: <b>12925</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 NW 13<sup>th</sup> Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>( 352) 377 - 5822</b> ext. <b>18</b> Fax: <b>( 352) 377-7158</b>
4. Professional Engineer E-mail Address: <b>jkoogler@kooglerassociates.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" type="checkbox"/> if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature _____ Date <u>12/12/12</u> (seal)

- Attach any exception to certification statement



## FACILITY INFORMATION

### Facility Regulatory Classifications

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

1.	<input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2.	<input type="checkbox"/> Synthetic Non-Title V Source	
3.	<input checked="" type="checkbox"/> Title V Source	
4.	<input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5.	<input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6.	<input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7.	<input type="checkbox"/> Synthetic Minor Source of HAPs	
8.	<input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9.	<input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10.	<input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11.	<input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12.	<p>Facility Regulatory Classifications Comment:</p> <p><b>The Brooksville South Cement Plants are subject to applicable portions of:</b>  <b>40 CFR 51, 52, 70, 71 – GHG Tailoring Rule (see note below)</b>  <b>40 CFR 63 Subpart LLL</b>  <b>40 CFR 60 Subpart F (superseded by NESHAP Subpart LLL)</b>  <b>40 CFR 60 Subpart Y</b>  <b>40 CFR 60 Subpart OOO</b>  <b>40 CFR 241</b>  <b>40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII as applicable.</b>  <b>Rules 62-4 through 62-297, F.A.C.</b></p> <p><b>NOTE: The two cement plants are also subject to the federal requirements of the Greenhouse Gas Reporting Program codified at 40 CFR 98. This is not a requirement of the State of Florida</b></p>	

**FACILITY INFORMATION**

**List of Pollutants Emitted by Facility**

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	A	N
PM10	A	N
SO2	A	N
NOx	A	N
CO	A	N
Hazardous air Pollutants (HAPs)	A	N
D/F	B	N
H114	B	N
SAM	B	N
FL	B	N



## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION

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

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>2010-FCB-F1</u> <input type="checkbox"/> Previously Submitted, Date: <u>11/08/2010*</u>
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>2010-FCB-F2</u> <input type="checkbox"/> Previously Submitted, Date: <u>11/08/2010</u>
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: <u>2010-FCB-F3</u> <input type="checkbox"/> Previously Submitted, Date: <u>11/08/2010</u>

#### Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: <u>NA</u>
3. Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____
4. List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**\*- All required Attachments were provided to FDEP with the TV application for renewal resulting in Permit No. 0530021-021-AV, effective 07/18/2011. The Attachment IDs are preserved in this Application for reference; but the Attachments are not resubmitted.**



## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### Additional Requirements for FESOP Applications

- |  |
|--|
| 1. List of Exempt Emissions Units:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility) |
|--|

#### Additional Requirements for Title V Air Operation Permit Applications

- |  |
|--|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: <b>2010-FCB-FTV1*</b> <input type="checkbox"/> Not Applicable (revision application)  |
| 2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: <b>2010-FCB-FTV2*</b><br><input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)  |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)<br><input type="checkbox"/> Attached, Document ID: <b>2010-FCB-FTV3*</b><br>Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed<br><input checked="" type="checkbox"/> Not Applicable  |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable   |
| 6. Requested Changes to Current Title V Air Operation Permit:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable  |

\* Submitted 11/08/2010

**FACILITY INFORMATION**

**C. FACILITY ADDITIONAL INFORMATION (CONTINUED)**

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

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

Attached, Document ID:  Previously Submitted, Date: \_\_\_\_\_

Not Applicable (not an Acid Rain source)

Phase II NO<sub>x</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable

New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable (not a CAIR source)

**Additional Requirements Comment**