



August 05, 2010

Mr. Jonathan Holtom P.E.  
Title V Administrator  
Title V Air Permitting Section  
Bureau of Air Regulation  
Division of Air Resource Management  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 5500  
Tallahassee, Florida 32399-2400

RECEIVED  
AUG 16 2010  
BUREAU OF  
AIR REGULATION

Re: Addition of Insignificant Activity to Appendix I  
Anclote Power Plant  
Title V Permit No: 1010017-012-AV  
Facility ID No: 1010017  
Pasco County

Dear Mr. Holtom:

Florida Power Corporation's (d/b/a Progress Energy Florida, Inc. (PEF)) Anclote Power Plant periodically cleans the internal portions of the boiler by circulating a chemical cleaning fluid at low temperature through the boiler tubes. This cleaning fluid is then processed to generate a non-hazardous fluid that PEF would like to inject into the boiler, and therefore, would like to add an item to *Appendix I-1 - List of Insignificant Emission Units and/or Activities* for the Anclote facility. The addition to Appendix I-1 would likely read as follows:

- On-site generated non-hazardous boiler chemical cleaning fluid injected directly or simultaneously with No. 6 fuel oil into the boilers of Emission Unit 001 or Emission Unit 002.

Analysis of four (4) grab samples from the most recent (December 2009) processed boiler chemical cleaning fluids are included in Attachment 1. Assuming that Progress Energy generates 200,000 gallons of boiler chemical cleaning fluid, the projected emissions from injection of the boiler chemical cleaning fluid into boilers are summarized in the Table 1. The determination of the emitted mass of metals employed the highest value of each metal from the analysis of the four (4) grab samples of the processed boiler chemical cleaning fluid which was conducted in December of 2009.

**TABLE 1**  
 Estimated Emissions from Combustion of  
 Non- Hazardous Boiler Chemical Cleaning Fluid

<b>Metal</b>	<b>Concentration (mg/L)</b>	<b>Oz. of Metal Emitted</b>	<b>Lbs. of Metal Emitted</b>
Arsenic (As)	0.03	0.80	0.050
Barium (Ba)	0.117	3.12	0.195
Cadmium (Cd)	0.006	0.16	0.010
Chromium (Cr)	4.21	112.43	7.027
Lead (Pb)	0.002	0.05	0.003
Selenium (Se)	0.21	5.61	0.351
Silver (Ag)	0.01	0.27	0.17
<b>Total</b>	-	<b>122.44</b>	<b>7.65</b>

**Assumption:** Based on 200,000 gallons of treated boiler cleaning fluid.

As indicated in Table 1, emissions from this activity are less than the Generic Emission Unit Exemption levels; i.e.,

- a. It would be subject to no unit-specific applicable requirement.
- b. It would neither emit nor have the potential to emit:
  - (I) 500 pounds per year or more of lead and lead compounds expressed as lead;
  - (II) 1,000 pounds per year or more of any hazardous air pollutant
  - (III) 2,500 pounds per year or more of total hazardous air pollutants; or
  - (IV) 5.0 tons per year or more of any other regulated pollutant.

Furthermore, the Title V Permitting Action Tree - Item No. 13 authorizes waiting until the Title V permit is revised or renewed to incorporate changes into Appendix I-1. Accordingly, PEF would appreciate inserting this activity, injection of non-hazardous boiler chemical cleaning fluid into the boiler, into *Appendix I-1 - List of Insignificant Emission Units and/or Activities* once the Anclote Title V permit is revised or renewed. Progress Energy currently plans to inject the non-hazardous boiler chemical cleaning fluid into the boiler prior to the end of 2010.

Jon Holtom, P.E., Title V Administrator  
Anclote Plant - Addition to Appendix I  
August 05, 2010  
Page 3 of 3

If you have any questions, please feel free to contact Mr. Chris Bradley at (727) 820-5962, and thank you very much for your consideration of this matter.

*I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this document is being submitted. I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.*

Best regards,



Al Renedo  
O&M Superintendent  
Alternate RO

Attachment

# ATTACHMENT 1

Chemical Analysis of Four (4) Grab Samples  
of  
Processed Boiler Chemical Cleaning Fluid

Boiler Chemical Cleaning  
Performed in December 2009  
Anclote Power Plant  
Facility ID No. 1010017  
Pasco County



# Laboratory Services

5012 Causeway Blvd \* Tampa Fl. 33619 \* Ph (813)630-7378 \* Fax (813)630-7360 \* DOH #E54272

**Report For:** Jeff Smith, Progress Energy Florida Inc.  
15760 W. Powerline St. CN77  
Crystal River, FL. 34428  
Phone: 352-563-4463  
Fax: 352-563-4497

**Report Date:** 12/22/2009

**Laboratory ID:** AB04754

**Location Code:** SPECL-PEI

## Sample Information

**Description:** Progress Energy, [ANCU109-CC-28]  
**Project Account Code:** 01  
**Sample Collection Method:** GRAB

**Sampled By:**  
**Date and Time Collected:** 12/18/2009 2:00:00 PM  
**Date of Sample Receipt:** 12/21/2009

## Laboratory Results

PARAMETER	Result	Units	MDL	Qualifier Code	Test Method	Analyst	Analysis Date & Time	Lower Limit	Upper Limit	Violation Check
<b><u>RCRA ICP Metals</u></b>										
Arsenic	< 0.03	mg/L	0.03	U	EPA 6010	KAQVP	12/22/2009 2:39:00 PM		5.0	
Barium	0.117	mg/L	0.005		EPA 6010	KAQVP	12/22/2009 2:39:00 PM		100	
Cadmium	0.004	mg/L	0.002	I	EPA 6010	KAQVP	12/22/2009 2:39:00 PM		1.0	
Chromium	0.591	mg/L	0.01		EPA 6010	KAQVP	12/22/2009 2:39:00 PM		5.0	
Lead	< 0.002	mg/L	0.002	U	EPA 6010	KAQVP	12/22/2009 2:39:00 PM		5.0	
Selenium	0.123	mg/L	0.03		EPA 6010	KAQVP	12/22/2009 2:39:00 PM		1.0	
Silver	< 0.01	mg/L	0.01	U	EPA 6010	KAQVP	12/22/2009 2:39:00 PM		5.0	

## Comments

All results calculated on a wet to wet basis, unless otherwise indicated.

### Data Qualifier Codes Explanation:

U - Indicates that the compound was analyzed for but not detected.

I - The reported value is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit (PQL). PQL = 4 x MDL.

Should there be any questions regarding this report, please contact:

*Cheryl Howard*

Cheryl Howard,  
Designee for Peggy Penner,  
Manager, Laboratory Services  
(813) 630-7490

Laboratory Services certifies that the test results in this report meet all requirements of the NELAC standards, unless indicated otherwise in the body of the report. Unless otherwise noted, all methods followed are per the most current published version of 40 CFR Part 136, Table B. Results reported on this report pertain to the above referenced sample only.



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Phone: 352-563-4463  
Fax: 352-563-4497

**Report Date:** 12/22/2009

**Laboratory ID:** AB04755  
**Location Code:** SPECL-PEI

## Sample Information

**Description:** Progress Energy, [ANCU109-CC-29]  
**Project Account Code:** 01  
**Sample Collection Method:** GRAB

**Sampled By:**  
**Date and Time Collected:** 12/18/2009 9:00:00 PM  
**Date of Sample Receipt:** 12/21/2009

## Laboratory Results

PARAMETER	Result	Units	MDL	Qualifier Code	Test Method	Analyst	Analysis Date & Time	Lower Limit	Upper Limit	Violation Check
<b>RCRA ICP Metals</b>										
Arsenic	< 0.03	mg/L	0.03	U	EPA 6010	KAQVP	12/22/2009 2:34:00 PM		5.0	
Barium	0.027	mg/L	0.005		EPA 6010	KAQVP	12/22/2009 2:34:00 PM		100	
Cadmium	0.004	mg/L	0.002	I	EPA 6010	KAQVP	12/22/2009 2:34:00 PM		1.0	
Chromium	4.21	mg/L	0.01		EPA 6010	KAQVP	12/22/2009 2:34:00 PM		5.0	
Lead	< 0.002	mg/L	0.002	U	EPA 6010	KAQVP	12/22/2009 2:34:00 PM		5.0	
Selenium	0.181	mg/L	0.03		EPA 6010	KAQVP	12/22/2009 2:34:00 PM		1.0	
Silver	< 0.01	mg/L	0.01	U	EPA 6010	KAQVP	12/22/2009 2:34:00 PM		5.0	

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Crystal River, FL. 34428  
Phone: 352-563-4463  
Fax: 352-563-4497

**Report Date:** 12/22/2009

**Laboratory ID:** AB04756  
**Location Code:** SPECL-PEI

## Sample Information

**Description:** Progress Energy, [ANCU109-CC-30]  
**Project Account Code:** 01  
**Sample Collection Method:** GRAB

**Sampled By:**  
**Date and Time Collected:** 12/19/2009 4:00:00 PM  
**Date of Sample Receipt:** 12/21/2009

## Laboratory Results

PARAMETER	Result	Units	MDL	Qualifier Code	Test Method	Analyst	Analysis Date & Time	Lower Limit	Upper Limit	Violation Check
<b>RCRA ICP Metals</b>										
Arsenic	< 0.03	mg/L	0.03	U	EPA 6010	KAQVP	12/22/2009 2:29:00 PM		5.0	
Barium	0.070	mg/L	0.005		EPA 6010	KAQVP	12/22/2009 2:29:00 PM		100	
Cadmium	0.006	mg/L	0.002	I	EPA 6010	KAQVP	12/22/2009 2:29:00 PM		1.0	
Chromium	1.03	mg/L	0.01		EPA 6010	KAQVP	12/22/2009 2:29:00 PM		5.0	
Lead	< 0.002	mg/L	0.002	U	EPA 6010	KAQVP	12/22/2009 2:29:00 PM		5.0	
Selenium	0.210	mg/L	0.03		EPA 6010	KAQVP	12/22/2009 2:29:00 PM		1.0	
Silver	< 0.01	mg/L	0.01	U	EPA 6010	KAQVP	12/22/2009 2:29:00 PM		5.0	

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Crystal River, FL. 34428  
Phone: 352-563-4463  
Fax: 352-563-4497

**Report Date:** 12/22/2009

**Laboratory ID:** AB04757  
**Location Code:** SPECL-PEI

## Sample Information

**Description:** Progress Energy, [ANCU109-CC-31]  
**Project Account Code:** 01  
**Sample Collection Method:** GRAB

**Sampled By:**  
**Date and Time Collected:** 12/21/2009 3:00:00 AM  
**Date of Sample Receipt:** 12/21/2009

## Laboratory Results

PARAMETER	Result	Units	MDL	Qualifier Code	Test Method	Analyst	Analysis Date & Time	Lower Limit	Upper Limit	Violation Check
<b>RCRA ICP Metals</b>										
Arsenic	< 0.03	mg/L	0.03	U	EPA 6010	KAQVP	12/22/2009 2:23:00 PM		5.0	
Barium	0.039	mg/L	0.005		EPA 6010	KAQVP	12/22/2009 2:23:00 PM		100	
Cadmium	0.006	mg/L	0.002	I	EPA 6010	KAQVP	12/22/2009 2:23:00 PM		1.0	
Chromium	2.70	mg/L	0.01		EPA 6010	KAQVP	12/22/2009 2:23:00 PM		5.0	
Lead	< 0.002	mg/L	0.002	U	EPA 6010	KAQVP	12/22/2009 2:23:00 PM		5.0	
Selenium	0.151	mg/L	0.03		EPA 6010	KAQVP	12/22/2009 2:23:00 PM		1.0	
Silver	< 0.01	mg/L	0.01	U	EPA 6010	KAQVP	12/22/2009 2:23:00 PM		5.0	

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