IN REPLY REFER TO

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CCB Reports
c/o Mr. Edward M. Dexter, Administrator
Solid Waste Program, Suite 605
Maryland Department of the Environment
1800 Washington Blvd
Baltimore, MD 21230-1719

Dear Mr. Dexter:

Naval Support Facility Indian Head (NSFIH) is submitting the Coal Combustion Byproducts (CCB) Annual Generator Tonnage Report for Calendar Year 2012 (Enclosure 1).

Please mail all correspondence to:

ATTN: Director Environmental Division
Department of Navy
NAVFAC Washington, PWD South Potomac
3972 Ward Road, Suite 101
Indian Head, MD 20640-5157

RECEIVED

FEB 4 2013

SOLID WASTE
OPERATIONS DIVISION

If you have any questions or comments concerning this letter, please contact Mr. Dave Hoffman on (301) 744-1616.

Sincerely,

JEFFREY C. BOSSART
By direction

Enclosure: (1) CCB Tonnage Report - 2012

MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Suite 605 • Baltimore, Maryland 21230-1719
410-537-3375 • 800-633-6101 x3375 • www.mde.state.md.us

Waste Management Administration • Solid Waste Program

Coal Combustion Byproducts (CCB)
Annual Generator Tonnage Report

Instructions for Calendar Year 2012

The following is general information relating to the requirement for reporting quantities of coal combustion byproducts that were managed in the State of Maryland during calendar year 2012. Please answer the questions on the form provided, attaching additional information and any requested supplemental information to the back of the form. Questions can be directed to the Solid Waste Program at (410) 537-3318 or via email at edexter@mde.state.md.us.

I. Background. This requirement that generators of coal combustion byproducts (CCBs) submit an annual report was instituted in the Code of Maryland Regulations COMAR 26.04.10.08, that was promulgated effective December 1, 2008. The regulation requires that any non-residential generator of CCBs submit a report to the Department by March 1 of each year describing the manner in which CCBs generated within the State were managed during the preceding calendar year. Additional information and specific instructions follow. For more detailed information, please refer to COMAR 26.04.10.08.

II. General Information and Applicability.

A. Definitions. Coal combustion byproducts are defined in COMAR 26.04.10.02B as:

> *"(3) Coal Combustion Byproducts. (a) "Coal combustion byproducts" means the residue generated by or resulting from the burning of coal.*
> *(b) "Coal combustion byproducts" includes fly ash, bottom ash, boiler slag, pozzolan, and other solid residuals removed by air pollution control devices from the flue gas and combustion chambers of coal burning furnaces and boilers, including flue gas desulfurization sludge and other solid residuals recovered from flue gas by wet or dry methods. "*

A generator of CCBs is defined in COMAR 26.04.10.02B as:

> *"(9) Generator.*
> *(a) "Generator" means a person whose operations, activities, processes, or actions create coal combustion byproducts.*
> *(b) "Generator" does not include a person who only generates coal combustion byproducts by burning coal at a private residence."*

B. Applicability. **If you or your company meet the definition of a generator of CCBs as defined above, you must provide the information as required below**. For the purposes of this report, "you" shall hereinafter refer to the generator defined above. Please note that COMAR 26.04.10.08 requires generators of CCBs to submit an annual report to the Department

concerning the disposition of the CCBs that they generated the previous year.   **THIS INCLUDES CCBS THAT WERE NOT SEPERATELY COLLECTED BUT WERE PRODUCED BY THE BURNING OF COAL AND WERE DIRECTLY CONTRIBUTED TO A PRODUCT, such as cement.** Where the amount cannot be directly measured, estimates based on the amount of coal burned can be used. The method of determining the volume of CCBs produced must be described.

III. Required Information. The following information must be provided to the Department by March 1, 2012:

A. Contact information:

Facility Name: Naval Support Facility Indian Head

Name of Permit Holder: Naval Support Activity South Potomac

Facility Address: 3972 Ward Road Suite 101
                                                    Street

Facility Address: Indian Head   Maryland   20640
                              City   State   Zip

County: Charles

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: (301) 744-4705   Facility Fax No.: (301) 744-4180

Contact Name: Jeffrey Bossart

Contact Title: Installation Environmental Program Manager

Contact Address: 3972 Ward Road Suite 101
                                                    Street

Contact Address: Indian Head   Maryland   20640
                              City   State   Zip

Contact Email: Jeffrey.bossart@navy.mil

Contact Telephone No.: (301) 744-4705   Contact Fax No.: (301) 744-4180

For questions on how to complete this form, please call Edward Dexter, Solid Waste Program at 410-537-3318.

E. Copies of all laboratory reports of all chemical characterizations of the coal combustion byproducts. Please attach this information to the report.

F. A description of how you disposed of or used your coal combustion byproducts in calendar 2010, identifying:

(a) The types and volume of coal combustion byproducts disposed of or used (if different than described in Paragraph C above), the location of disposal, mine reclamation and use sites, and the type and volume of coal combustion byproducts disposed of or used at each site:

All (100%) of CCB has been hauled and disposed at King George Landfill in King George County, VA. All CCB is from Goddard Steam Plant and consists of ash from coal combustion.

and (b) The different uses by type and volume of coal combustion byproducts:

CCB has not been used for other purposes.

If the space provided is insufficient, please attach additional pages in a similar format. . (Please note that in subsequent years you need only provide the information in Section F for the last calendar year).

G. A description of how you intend to dispose of or use coal combustion byproducts in the next 5 years, identifying:

(a) The types and volume of coal combustion byproducts intended to be disposed of or used, the location of intended disposal, mine reclamation and use sites, and the type and volume of coal combustion byproducts intended to be disposed of or used at each site:

All (100%) of CCB will be disposed in accordance with applicable regulatory requirements. CCB consists of fly ash from coal combustion at Goddard Steam Plant. CCB will continue to be disposed at King George County Landfill (Virginia).

and   (b) The different intended uses by type and volume of coal combustion byproducts.

None.

If the space provided is insufficient, please attach additional pages in a similar format.

IV. Signature and Certification. An authorized official of the generator must sign the annual report, and certify as to the accuracy and completeness of the information contained in the annual report:

B. A description of the process that generates the coal combustion byproducts, including the type of coal or other raw material that generates the coal combustion byproducts. If the space provided is insufficient, please attach additional pages:

Coal is utilized as a fuel source for operation of 3 boiler systems at the Goddard Steam Plant. Fly ash is generated as a combustion byproduct. Coal type is bituminous, modified stocker coal, 2" x ¼" with certified analysis as follows: 5.5% moisture, 37.35% volatile matter (dry basis), 9.12% dry ash, 0.83% sulfur (dry basis) and 13,655 BTU (dry basis).

C. The volume of coal combustion byproducts generated during calendar year 2012, including an identification of the different types of coal combustion byproducts generated and the volume of each type generated. If the space provided is insufficient, please attach additional pages in a similar format:
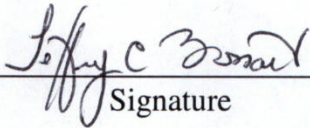
Table I: Volume and Weight of CCBs Generated for Calendar 2012:

Volume and Weight of CCBs Generated for Calendar Year 2012			
Naval Support Facility Indian Head			
Bituminous Type of CCB	Type of CCB	Type of CCB	Type of CCB
7507 Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
3959 Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Additional notes: See attached spreadsheet for calculations.

D. Descriptions of any modeling or risk assessments, or both, conducted relating to the coal combustion byproducts or their use, that were performed by you or your company during the reporting year. Please attach this information to the report.

This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.		
(signature) Signature	Jeffrey Bossart Installation Environmental Program Manager Jeffrey.bossart@navy.mil	29 Jan 2013 Date

V: Attachments

1. Laboratory analysis results for fly ash
2. Calculations sheet

Anabell
Environmental, Inc.

8648 Dakota Drive, Gaithersburg, MD 20854 Tel./Fax.:(301)548-

Laboratory Analysis Results

Laboratory: Anabell Environmental
Client: **Atlantic Environmental**
Sample ID: **1210-PH-01 (F14 ASH)**

Waste Type: Bulk Solid

Analyte(s): TCLP /RCRA
Method: EPA 1311
Date Sampled: 12/29/2010
Date Received: 1/7/2011
Date Extracted: 1/9/2011

CAS	TCLP Parameter	EPA Method	Date Analyzed	Quantitation Limit, mg/L	Concentration Detected, mg/L	Regulatory Level, mg/L	Above TCLP Level (Y)
TCLP METALS							
7440-38-2	Arsenic	BE/7060	1/10/2011	0.100	0.037	5.0	
7440-39-3	Barium	BE/7080	1/10/2011	0.050	0.770	100.0	
7440-43-9	Cadmium	BE/7130	1/10/2011	0.005	0.011	1.0	
7440-47-3	Chromium	BE/7190	1/10/2011	0.010	0.021	5.0	
7439-92-1	Lead	BE/7420	1/10/2011	0.045	0.019	5.0	
7439-97-6	Mercury	BE/7470	1/10/2011	0.002	< 0.020	0.2	
7782-49-2	Selenium	BE/7740	1/10/2011	0.100	< 0.010	1.0	
7440-22-4	Silver	BE/7760	1/10/2011	0.010	< 0.010	5.0	
RCRA CHARACT.							
RCRA	Ignitability	1010	1/10/2011	2 C	> 90 C	60 C limit	
RCRA	Corrosivity	9040	1/9/2011	0.1 pH	pH = 6.0	pH<2, >12.5	
RCRA	Reactivity						
	Cyanide	9010	1/9/2011	5 mg HCN/Kg	< 5 mg HCN/Kg	> 250 mg HCN/Kg	
	Sulfide	9030	1/9/2011	50 mg H2S/Kg	< 50 mg H2S/Kg	> 500 mg H2S/Kg	

Approved _____ 1/10/2011
                        Date

NSF Indian Head - Additional Information for 2012 CCB Report		

Reporting Year	CCB Type: Fly Ash from Coal Combustion	
	Tons	Cu.Ft. *
2012	3959	202,701
2011	4729	242,125
2010	3320	169,984
2009	4672	239,206
2008	5585	285,952
2007	7873	403,098
2006	8573	438,938

Data provided by contracted hauler utilized during reporting period
*Cubic Feet determined from average vehicle tonnages, dimensions, and % capacity

Average Load Weight	22 Tons/Load	
Average Capacity of Ash	80%	
Average Trailer Volume	1408 Cubic Feet	
Average Fly Ash Volume	1408 Cubic Feet * 80% Ash =	1126 cubic feet Ash/load
Average Volume/Ton	1126 cubic feet/load * 1 load/22 tons =	51.2 cubic feet/ton

Cu. Ft Calculation is then:	Tons/year * 51.2 cubic feet/ton =	See Above Table

Calculated Cu. Ft/ton is within 25% of average density of fly ash of 2.3 g/cm^3, reported in the following reference:
Chandra, Satish. "Waste Materials used in Concrete Manufacturing", 1997.

Avg. Density of Fly Ash per source:	2.3 g/cm^3
Avg. Density in cu. Ft/ton:	

$$2.3\,g/cm^3 * \frac{(100\,cm)^3}{m^3} * \frac{m^3}{(3.28\,ft)^3} * \frac{kg}{1000\,g} * \frac{lb}{2.2\,Kg} = (\frac{29.6\,lb}{ft^3} * \frac{Ton}{2000\,lb})$$

$$(\frac{29.6\,lb}{ft^3} * \frac{Ton}{2000\,lb})^{-1} = \frac{67.6\,ft^3}{ton}$$

Within 25% of calculated density at Goddard Power Plant

Cubic Feet to Cubic Yard Conversion

1 cubic yard = 27 cubic feet	242,125 / 27 = 8968 cubic yards	