



State of Ohio Environmental Protection Agency

**Southeast District Office**

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Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

May 13, 2009

**Re:** Coshocton County  
CSP Conesville Generating Station  
Ohio EPA Permit No. 0IB00013\*LD  
NPDES Permit No. OH0005371  
Compliance Evaluation Inspection  
Correspondence (PWW)

Mr. Mark Borman, Plant Manager  
Columbus Southern Power Company  
Conesville Generating Station  
47201 C.R. 273  
Conesville, Ohio 43811

Dear Mr. Borman:

On April 27, 2009, Ohio EPA conducted a Compliance Evaluation Inspection at the Columbus Southern Power Company Conesville Generating Station. The purpose of the inspection was to determine compliance with terms and conditions of National Pollutant Discharge Elimination System (NPDES) permit number 0IB00013\*LD and to evaluate the wastewater treatment system(s) performance. Gigi Hammond and Mark Stammen represented American Electric Power during the inspection.

The facility is currently installing a SCR for Unit 4 which utilizes Urea and Trona as part of an air pollution control system. These systems commonly contribute ammonia and thallium among other pollutants to wastewater discharges at both discharges of fly ash transport water and scrubber purge water. The current NPDES permit was developed without requiring any thallium monitoring and ammonia monitoring of fly ash transport water based primarily on historical data from the facility. We are requesting that American Electric Power additionally monitor the following parameters for a period of 6 months once the Unit 4 SCR and JBR system is fully operative with purging to establish compliance with Water Quality Standards.

Outfall	Parameter	Measuring Frequency	Sampling Type
001	00610-Nitrogen, Ammonia(NH3) – mg/L	2/Month	Grab
001	00625-Nitrogen Kjeldahl, Total – mg/L	2/Month	Grab
001	00630-Nitrogen Nitrite Plus Nitrate, Total-mg/L	2/Month	Grab
001	00982-Thallium, Total Recoverable – ug/L	2/Month	Grab
604	00982-Thallium, Total Recoverable – ug/L	2/Month	Grab

Our agency has also been made aware of a sparger unit associated with the urea feed system that may need to discharge at high concentration yet low volumes. The discharge volume of the sparger unit should be noted throughout the 6 month period. Reporting the above monitoring data may be done through adding a parameter to the appropriate monitoring table in the e-DMR system. We would also be satisfied with reporting the collected data to the Southeast District Office upon completion of the 6 month monitoring period. Upon receiving the data, the Ohio EPA will evaluate whether the ammonia and nitrogen nutrients have been properly wasteload allocated for the Conesville facility and whether an effluent limit and/or monitoring is appropriate for the NPDES permit. Similarly, reported thallium data will be reviewed with accordance to Water Quality Standards for the Muskingum River.

The Conesville facility is reportedly installing duplicate dry ash disposal facilities for Units 5 & 6 to provide more flexibility in getting each unit to completely handle fly ash in a dry manner. Unit 3 is an all wet fly ash handling scheme with a scheduled decommission in approximately 2011. Unit 4 has some ability to handle fly ash dry. There appears to be a large effort currently underway to get Unit 4 to handle fly ash dry. By handling all fly ash without transport water, the Conesville facility should greatly reduce the ammonia, thallium, mercury, selenium, among other pollutant and nutrient loadings subject to discharge at outfall 001.

We have received self-monitoring reports covering the months of April 2007 through March 2009 for the referenced facility. Our review indicated the following violations of your NPDES permit.

Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
607	31616	Fecal Coliform	1D Conc	2000	27600.	5/4/2007
602	80082	CBOD 5 day	30D Conc	10	14.5	1/1/2008
602	80082	CBOD 5 day	1D Conc	15	17.	1/23/2008
602	80082	CBOD 5 day	1D Conc	15	20.	1/24/2008
602	80082	CBOD 5 day	1D Conc	15	16.	1/25/2008
001	00981	Selenium, Total Recoverable	30D Qty	5.72	6.57831	2/1/2008
602	80082	CBOD 5 day	1D Conc	15	19.	11/12/2008
602	80082	CBOD 5 day	1D Conc	15	16.	11/18/2008
602	80082	CBOD 5 day	30D Conc	10	12.625	12/1/2008
602	80082	CBOD 5 day	1D Conc	15	16.	12/3/2008
602	80082	CBOD 5 day	1D Conc	15	18.	12/11/2008
602	80082	CBOD 5 day	1D Conc	15	20.	12/24/2008

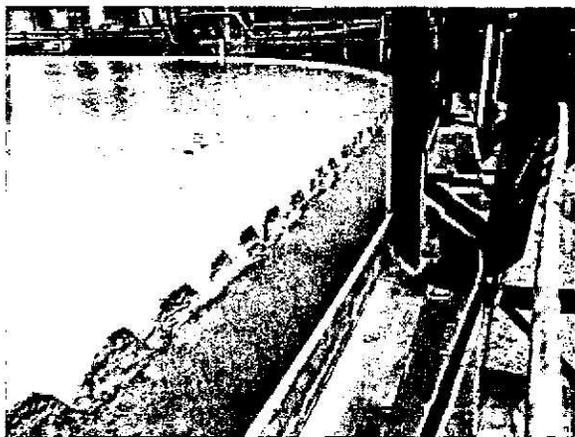
The tabled violations above were followed up with the proper notification to our agency as required by the permit. In recent months, the Ohio EPA has developed forms for permittee's use in reporting the required non-compliance follow-up data. I provided an internet link to Gigi Hammond as access to the forms and attached a hard copy herein. These forms are not required to be used; they simply prompt all the questions to be included with a non-compliance notification. Communication of any non-compliance

has steadily been received in a timely manner and corrective actions quickly pursued, I commend you and your staff.

With regards to the CBOD<sub>5</sub> violations at outfall 602 (U1-3 STP), an enclosure over the treatment unit has been added in addition to working with a consultant and hiring a contract operator. The contract operator reportedly modified the equalization arrangement by manipulating the return box weirs and pump floats to improve equalization. The Operator also had the plant seeded with organisms from the 4-6 STP. Monitored data is reportedly showing improvement.

As a reminder, Part II Item W. explains that if the NPDES permit was renewed or modified after December 21, 2008, the sewage treatment plants would be classified as Class A facilities requiring the minimum staffing in OAC 3745-7-04(C)(1).

Units 5 & 6 FGD clarifiers in past inspections had overflow issues. A weir box has been established from the overflow trough to help identify the amount of overflow. Optimization of the return pumps and make up water has been employed along with installation of a surge tank per unit. The below pictures attest to the improvement made.



Using the approved analytical procedures promulgated at 40 CFR 136, Total Residual Chlorine and Total Residual Oxidants should be analyzed with a Method Detection Limit(MDL) at or below 0.050mg/L. Some of the reported data has been submitted as "0". Please utilize the AA code for below detectable limits as appropriate and verify that the laboratory MDL is at or below 0.050mg/L using methods found in Appendix B of 40 CFR 136. A portion of the data was received with an MDL reported at 0.01mg/L which is in compliance with the permit. The eDMR system now accepts "AA 0.01" to report analyzing below detectable limit with MDL of 0.01. Similarly, report "AA 0.03" if the MDL is at 0.03, etc.

A few clarifications/interpretations of permit language were requested during the inspection.

In Part II, Item AG Technology Based Limits 3.a. Regarding annual PMP "evaluate the removal rate efficiency of pollutants in the influent." I was asked to clarify what extent of testing is expected for this condition to be met. The primary focus of this condition was aimed at Mercury removal with "other metals" occasionally referenced. As your District representative, I would interpret the "other metals" as those listed in the monitoring table for 604. I would suggest using the parameter list in the 604 table to conduct at least one sample result for both influent(605) and effluent(604) when the WWTP is fully operational.

In Part II, Item AF of the permit states "The permittee shall begin operation of the organosulfide precipitation and gravity filter units within 18 months after the Flue Gas Desulfurization Chloride Purge Stream Wastewater Treatment Plant has begun operation." I was asked whether this statement will still be required regardless of any findings from the Mountaineer data. If the facility can achieve compliance of the 12ng/L Mercury concentration without installation, please provide correspondence with compelling data and the agency will consider removal of the condition. If the facility can employ an alternative treatment approach with comparable removal rates, the 18 months would still apply to that approach. From information I have read, I would definitely be open to an alternative to the gravity filtration. To date, the Conesville facility has been very proactive with implementation of the Pollutant Minimization Plan for Mercury. I commend your PMP activities.

Please follow up in writing within 30 days of receipt as acknowledgement of the additional requested monitoring parameters upon startup of the Unit 4 SCR/JBR systems.

A copy of the inspection report is enclosed. The assistance and cooperation received during the inspection was appreciated. If you have any questions, please feel free to contact me at (740) 380-5272.

Sincerely



Aaron Pennington  
District Representative  
Division of Surface Water

AMP/dh

Enclosure

- c: Gigi Hammond, AEP
- c: Mark Stammen, AEP
- c: Mike McCullough, OEPA, DSW, CO

**NPDES**  
Compliance Inspection Report

**A. NATIONAL DATA SYSTEM CODING**

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
0IB00013*LD	OH0005371	April 27, 2009	CEI	S	2

**B. FACILITY DATA**

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Columbus Southern Power Company Conesville Generating Station 47201 C.R. 273 Conesville, Ohio 43811	9:30 a.m.	January 1, 2008
	Exit Time	Permit Expiration Date
	2:30 p.m.	July 31, 2012

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Gigi Hammond, Environmental Coordinator	(740) 829-4065
Mark Stammen, Environmental Specialist IV	(614) 716-1541
Bethany Schunn, FGD Process Owner	(740) 828-4171
Name, Address and Title of Responsible Official	Phone Number
Mark Borman, Plant Manager	(740) 829-4034

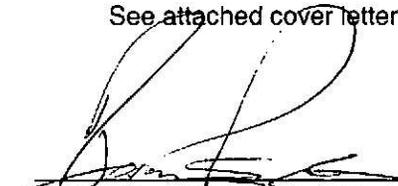
**C. AREAS EVALUATED DURING INSPECTION**

<u>  </u> S Permit	<u>  </u> S Flow Measurement	<u>  </u> N Pretreatment
<u>  </u> S Records/Reports	<u>  </u> S Laboratory	<u>  </u> N Compliance Schedules
<u>  </u> S Operations & Maintenance	<u>  </u> S Effluent/Receiving Waters	<u>  </u> S Self-Monitoring Program
<u>  </u> S Facility Site Review	<u>  </u> S Sludge Storage/Disposal	<u>  </u> Other
<u>  </u> N Collection System		

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

**D. SUMMARY OF FINDINGS/COMMENTS** (attach additional sheets if necessary)

See attached cover letter

  
\_\_\_\_\_  
Aaron Pennington, Inspector, Ohio EPA, Southeast District Office

5-12-09  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office

5/19/09  
\_\_\_\_\_  
Date

**E. PERMIT VERIFICATION**

Inspection Observations Verify the Permit	Yes	No	N/A	N/E
a. Correct name and mailing address of permittee	X			
b. Correct name and location of receiving waters	X			
c. Product(s) and production rates conform with permit application (industries)	X			
d. Flows and loadings conform with NPDES permit	X			
e. Treatment processes are as described in permit application/briefing memo	X			
f. New treatment process(es) added since last inspection		X <sup>1</sup>		
g. Notification given to state of new, different, or increased discharges	X			
h. All discharges are permitted	X			
i. Number and location of discharge points are as described in permit	X			

<sup>1</sup>In construction of Unit 4 SCR/JBR scrubbers.

**F. COMPLIANCE SCHEDULES/VIOLATIONS**

	Yes	No	N/A	N/E
a. Any significant violations since the last inspection	X <sup>1</sup>			
b. Permittee is taking actions to resolve violations	X			
c. Permittee has compliance schedule		X		
d. Compliance schedule contained in: _____			X	
e. Permittee is meeting compliance schedule			X	

<sup>1</sup>CBOD<sub>5</sub> violations at outfall 602 (U1-3 STP). Permittee has added an enclosure over the treatment unit in addition to working with a consultant and hiring a contract operator. Contract Operator reportedly modified the equalization arrangement by manipulating the return box weirs and pump floats. The Operator also seeded the plant with Organisms from the 4-6 STP. Monitored data is reportedly showing improvement.

**G. OPERATION AND MAINTENANCE**

Treatment Facility Properly Operated and Maintained	Yes	No	N/A	N/E
a. Standby power available: Generator	X			
b. Adequate alarm system available for power or equipment failures	X			
c. All treatment units in service other than backup units	X			
d. Sufficient operating staff provided: # of shifts: 3 Days/Week: 7	X			
e. Operator holds unexpired license of class required by permit Class: _____			X <sup>1</sup>	
f. Routine and preventive maintenance schedule/performed on time	X			
g. Any major equipment breakdown since last inspection		X		
h. Operation and maintenance manual provided and maintained				X
i. Any plant bypasses since last inspection		X <sup>2</sup>		
j. Regulatory agency notified of bypasses: ___ on MORS ___ 800 Number		X		
k. Any hydraulic and/or organic overloads experienced since last inspection		X		

<sup>1</sup>Part II Item W. explains that if the NPDES permit was renewed or modified after December 21, 2008, the sewage treatment plants would be classified as Class A facilities requiring the minimum staffing in OAC 3745-7-04(C)(1).

<sup>2</sup>Units 5 & 6 FGD clarifiers in past inspections had overflow issues. A weir box has been established from the overflow trough to help identify the amount of overflow. Optimization of the return pumps and make up water has been employed along with installation of a surge tank per unit. During the inspection, there was no overflow – pictures of the available freeboard are shown in the cover letter.



