



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

JUN 21 2010

REPLY TO THE ATTENTION OF:  
AE-17J

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Jim Schaddel  
General Manager  
Cokenergy, LLC  
3210 Watling Street  
East Chicago, Indiana 46312

RE: Notice and Finding of Violation at Cokenergy LLC, East Chicago

Dear Mr. Schaddel:

The U.S. Environmental Protection Agency (EPA) is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Cokenergy, LLC (Cokenergy). This NOV/FOV is issued in accordance with Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a). EPA has determined that Cokenergy's facility at 3210 Watling Street, East Chicago, Indiana, has violated the Act and the Indiana State Implementation Plan (SIP). A list of the requirements violated is provided below.

Cokenergy's Title V permit contains, among other things, operational limitations, emissions limits and reporting requirements for sulfur dioxide (SO<sub>2</sub>) and opacity. These requirements help protect the public from unhealthy exposures to criteria pollutants, which contribute to respiratory problems, lung damage and premature deaths.

Based on data submitted to EPA on July 20, 2009, Cokenergy has violated provisions in its permit that govern operational restrictions and emissions limitations. Violations of these requirements are also violations of the Indiana State Implementation Plan (SIP), as well as of Title V of the Act and the regulations promulgated thereunder at 40 C.F.R. Part 70, which require compliance with the terms and conditions of Title V permits.

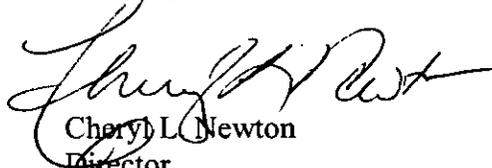
Section 113 of the Act gives EPA several enforcement options. These options include: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action.

Section 113 of the Act provides you with the opportunity to request a conference to confer with EPA about the violations cited in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice and any conference should be held within 30 days

following receipt of this notice. This conference will give you an opportunity to present information on the identified violations and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent you at this conference.

EPA's contact in this matter is Gina Harrison. You may call her at (312) 353-6956 if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Cokenergy's compliance with the requirements of the Act.

Sincerely,

A handwritten signature in black ink, appearing to read "Cheryl L. Newton", is written over the typed name.

Cheryl L. Newton  
Director  
Air and Radiation Division

Enclosure

cc: Michael Hall, Northwest Regional Office

**United States Environmental Protection Agency  
Region 5**

**IN THE MATTER OF:**

Cokenergy LLC  
East Chicago, Indiana

Proceedings Pursuant to  
the Clean Air Act,  
42 U.S.C. §§ 7401 et seq

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**NOTICE AND FINDING OF VIOLATION**

This Notice and Finding of Violation (Notice) is issued to Cokenergy LLC for violations of the Clean Air Act (Act), 42 U.S.C. § 7401 *et seq.*, and the Indiana State Implementation Plan (SIP) at the Indiana Harbor East facility in East Chicago, Indiana (facility).

This Notice is issued pursuant to Sections 113(a)(1) and (a)(3) of the Act, 42 U.S.C. § 7413(a)(1) and (3). The authority to issue this Notice has been delegated to the Regional Administrator of EPA, Region 5, and re-delegated to the Director, Air and Radiation Division.

**STATUTORY AND REGULATORY BACKGROUND**

**Indiana State Implementation Plan**

1. Section 110 of the Act, 42 U.S.C. § 7410, requires states to adopt, and submit to EPA for approval, SIPs providing for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS) promulgated by EPA pursuant to Section 109 of the Act, 42 U.S.C. § 7409. EPA has promulgated NAAQS for, among other pollutants, particulate matter (PM) and sulfur dioxide (SO<sub>2</sub>).

2. Pursuant to 40 C.F.R. § 52.23, failure to comply with any approved regulatory provision of a SIP, or with any permit condition issued pursuant to approved or promulgated regulations for the review of new or modified stationary or indirect sources, renders the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under Section 113 of the Act, 42 U.S.C. § 7413.

3. On September 26, 2005, the Administrator of EPA approved 326 IAC Rule 7-4 as part of the federally enforceable SIP for the State of Indiana. 70 *Fed. Reg.* 56129. 326 IAC 7-4

sets forth the sulfur dioxide emission limitations for Lake County emission sources and limits sulfur dioxide emissions from the Cokenergy and Indiana Harbor Coke Company facilities to 1,656 pounds per hour. 326 IAC 7-4.1-8.

### **Title V Requirements**

4. Section 502(d)(1) of the Act, 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to EPA an operating permit program which meets the requirements of Title V. On December 4, 2001, EPA granted Indiana final approval of its Title V Clean Air Act Permit Program, effective November 30, 2001. 66 *Fed. Reg.* 62969.

5. Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b) provide that, after the effective date of any permit program approved or promulgated under Title V of the Act, no source subject to Title V may operate except in compliance with a Title V permit.

6. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any major source located in a state that has received whole or partial approval of its Title V program.

### **FACTUAL BACKGROUND**

7. Cokenergy LLC (Cokenergy) owns and/or operates a flue gas desulfurization unit (FGD), baghouse, heat recovery coke carbonization waste gas stack (ES201), and heat recovery system at the Indiana Harbor Coke Company facility (Indiana Harbor Coke), used to produce steam and electricity for use at Mittal Steel USA, Inc., at Indiana Harbor Coke's East facility at 3210 Watling Street, East Chicago, Indiana (facility).

8. The facility is classified as a "major stationary source," as defined at 40 C.F.R. § 51.166(b)(i) and a "major source," as defined at 326 IAC 2-7-1(21).

9. Indiana Department of Environmental Management (IDEM), delegated authority by EPA, issued Cokenergy Construction Permit 089-9237-00383 on February 26, 1998, Construction Permit 089-14243-00383 on November 30, 2001 and Title V Operating Permit T089-11311-00383 (Title V permit) on June 29, 2006. The Title V permit incorporates all limits and operational constraints set forth in the Construction Permit.

10. Part D.1.2 of the Cokenergy Title V permit limits combined SO<sub>2</sub> emissions from stack ID 201 (ES201) and bypass vents from Indiana Harbor Coke to 1,656 pounds of SO<sub>2</sub> per hour (lbs/hr), averaged over 24 hours.

11. Part C.1(a) of the Cokenergy Title V permit limits opacity from stack ID 201 (ES201) and bypass vents from Indiana Harbor Coke to 20% in any one six-minute averaging period. Part C.1(b) provides that opacity shall not exceed 60% for more than a cumulative total of 15 minutes or 15 one-minute non-overlapping integrated averages in a six-hour period.

12. EPA sent information requests to Cokenergy on May 7, 2009, June 16, 2009, and August 4, 2009, requesting, among other things, Cokenergy's Title V deviation reports, continuous emissions monitoring systems (CEMS) data, and data related to malfunctions and/or emergencies that occurred at ES201.

13. Cokenergy responded to the information requests on July 20, 2009 and August 21, 2009, and provided information on emergency reports, Title V deviation reports and CEMS and/or COMS data for SO<sub>2</sub> and opacity. In addition, Cokenergy reported excess SO<sub>2</sub> emissions from the bypass vent stacks and the waste gas stack on 21 different days since January 2005.

14. EPA sent an information request to Indiana Harbor Coke on May 11, 2009, requesting, among other things, data detailing emissions exceeding its Title V permit limits.

15. Indiana Harbor Coke responded to the information request on June 11, 2009, June 19, 2009, July 21, 2009, August 14, 2009, and September 11, 2009, and reported excess SO<sub>2</sub> emissions combined from the bypass vent stacks and the waste gas stack on 34 different days since January 2005.

#### **VIOLATIONS OF EMISSION LIMITS AND OPERATING STANDARDS**

16. Cokenergy violated its Title V permit by exceeding the opacity limits of 20% on a 6-minute average at ES201. This limit was exceeded 17 times since September 2007. *See* Table A. These exceedances violated the operational standards of Cokenergy's Title V permit and Section 502(a) of the Act, 42 U.S.C. § 7661a(a) and 40 C.F.R. § 70.(b).

17. Cokenergy violated its Title V permit by exceeding the opacity limits of 60% over a cumulative total of 15 minutes in a 6-hour period for 60 readings, as measured according to 40 C.F.R. 60, Appendix A, Method 9 (or 15 one-minute non-overlapping integrated averages for a continuous opacity monitor) on May 11, 2008. *See* Table A.

18. Cokenergy violated the Indiana SIP at 326 IAC 7-4 since its effective date of October 26, 2005 and its Title V permit since its issuance on June 29, 2006, by exceeding SO<sub>2</sub> emissions limits from its heat recovery (ES201) waste gas stack combined with the 16 bypass vent stacks since 2005. This limit was exceeded 26 times since October 26, 2005 but was only reported by Cokenergy on 21 occasions. *See* Tables B and C.

19. Cokenergy violated the general reporting requirements of its Title V permit by failing to report all SO<sub>2</sub> exceedances to IDEM from 2005 – 2009. There were 13 instances when SO<sub>2</sub> emissions exceeded permit limits that were not reported as deviations in Cokenergy's Quarterly Title V reports. *See* Table C. Failure to report such deviations violate Section C.21 of Cokenergy's Title V permit, Section 502(a) of the Act, 42 U.S.C. § 7661a(a), and 40 C.F.R. § 70.7(b).

## ENVIRONMENTAL IMPACT OF VIOLATIONS

20. Excess SO<sub>2</sub> emissions increase the amount of acid rain and expose the public to unhealthy levels of SO<sub>2</sub>. SO<sub>2</sub> reacts with other chemicals in the air to form tiny sulfate particles. Long term exposure to high levels of SO<sub>2</sub> gas and particles can cause respiratory illness, aggravate existing heart disease, and lead to premature death.

21. Violations of particulate emissions standards increases public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

6/21/10  
Date

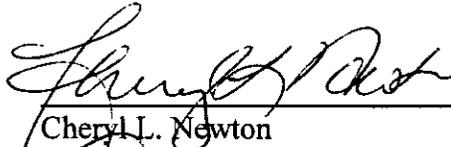
  
Cheryl L. Newton  
Director  
Air and Radiation Division

Table A: Excess Opacity

<b>Opacity from Cokenergy Quarterly Reports</b>		
<b>Date</b>	<b>Excess Opacity Reported</b>	<b>Duration</b>
	<b>Average</b>	<b>Min</b>
9/5/2007	21.1	6
10/24/2007	21.1	6
2/9/2008	23.2	6
2/9/2008	22.2	12
5/11/2008	83.5	24
2/11/2009	45.9	24
4/13/2009	24.9	18
4/14/2009	21.3	6

Table B: Excess SO<sub>2</sub> Emissions from the heat recovery coke carbonization waste gas stack (Stack ID 201) combined with the Sixteen (16) Bypass Vents as reported in Cokenergy Quarterly Deviation and Compliance Monitoring Reports.

SO2 Emissions				
Date	Total SO2 (lbs/hr)	Amount above 1656 lb/hr limit (lbs/hr)	Emissions above SO2 limit (lbs)	Emissions above SO2 limit (tons)
8/2/2006	1711	55	1320	0.66
2/2/2007	1677	21	504	0.252
8/20/2007	1660	4	96	0.048
12/13/2007	1672	16	384	0.192
12/27/2007	1714	58	1392	0.696
12/28/2007	1660	4	96	0.048
4/14/2008	1801	145	3480	1.74
8/26/2008	1705	49	1176	0.588
10/6/2008	2742	1086	26064	13.032
10/7/2008	2443	787	18888	9.444
10/8/2008	2591	935	22440	11.22
10/9/2008	2609	953	22872	11.436
10/10/2008	2128	472	11328	5.664

Table C: Excess SO<sub>2</sub> Emissions from the heat recovery coke carbonization waste gas stack (Stack ID 201) combined with the Sixteen (16) Bypass Vents as reported in Indiana Harbor Coke Company's Permit Compliance Summaries but not reported in Cokenergy Quarterly Deviation and Compliance Monitoring Reports.

SO <sub>2</sub> Emissions				
Date	Total SO <sub>2</sub> (lbs/hr)	Amount above 1656 lb/hr limit (lbs/hr)	Emissions above SO <sub>2</sub> limit (lbs)	Emissions above SO <sub>2</sub> limit (tons)
9/12/2005	2369	713	17112	8.556
9/13/2005	2662	1006	24144	12.072
9/14/2005	2595	939	22536	11.268
9/15/2005	2640	984	23616	11.808
9/16/2005	1815	159	3816	1.908
9/19/2005	1986	330	7920	3.96
9/20/2005	1704	48	1152	0.576
4/29/2006	1658	2	48	0.024
11/3/2006	2228	572	13728	6.864
11/4/2006	2252	596	14304	7.152
11/5/2006	1972	316	7584	3.792
11/7/2006	1690	34	816	0.408
1/5/2008	1684	28	672	0.336

Not reported by Cokenergy

**CERTIFICATE OF MAILING**

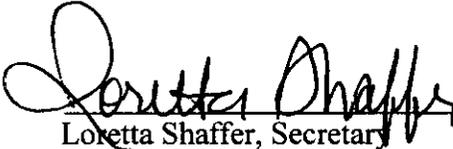
I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-10-15-IN by Certified Mail, Return Receipt Requested, to:

Cokenergy, LLC  
Jim Schaddel  
3210 Watling Street  
East Chicago, Indiana 46312

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Michael Hall  
Northwest Regional Office  
Indiana Department of Environmental Management  
8380 Louisiana Street  
Merrillville, Indiana 46410-9201

on the 22 day of JUNE, 2010

  
\_\_\_\_\_  
Loretta Shaffer, Secretary  
AECAS, MN-OH

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7670 0016