



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

OCT 30 2014

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Scott R. Alexander
Taft Stettinius & Hollister LLP
One Indiana Square, Suite 3500
Indianapolis, Indiana 46204-2023

Re: Administrative Order EPA-5-15-113(a)-IN-01

Dear Mr. Alexander,

Enclosed is an executed original of the Administrative Consent Order regarding the above captioned case. If you have any questions about the Order, please contact me at (312) 886-3850.

Sincerely,

A handwritten signature in black ink, appearing to read "Nathan A. Frank", is written over a large, stylized, and somewhat illegible signature.

Nathan A. Frank, P.E.
Chief
Air Enforcement and Compliance Assurance Section (IL/IN)

Enclosure:

cc: Regional Hearing Clerk, E-19J
Nidhi O'Meara, C-14J
Ethan Chatfield, AE-17J
Kevin Vuillemier, AE-17J
Katharine Owens, AE-17J
Phil Perry, IDEM

Executed Version

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

In the Matter of:)	EPA-5-15-113(a)-IN-01
)	
Duke Energy Indiana, Inc.)	Proceeding Under Sections 113(a)(1) and (3) and
Plainfield, Indiana)	114(a)(1) of the Clean Air Act, 42 U.S.C.
<hr/>)	§§ 113(a)(1) and (3) and 114(a)(1)

Administrative Consent Order

1. The Director of the Air and Radiation Division, U.S. Environmental Protection Agency (EPA), Region 5, is issuing this Order to Duke Energy Indiana, Inc. (Duke) under Sections 113(a)(1) and (3) and 114(a)(1) of the Clean Air Act (CAA), 42 U.S.C. §§ 7413(a)(1) and (3) and 7414(a)(1).

Statutory and Regulatory Background

Indiana State Implementation Plan

2. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit to the Administrator of the EPA a plan which provides for the implementation, maintenance, and enforcement of the national primary and secondary ambient air quality standards promulgated under Section 109 of the CAA within such state.

3. 40 C.F.R. Part 52, Subpart P sets forth the applicable State Implementation Plan (SIP) for Indiana, under Section 110 of the CAA. See 40 C.F.R. §§ 52.770 and 52.773.

4. On December 28, 2009, EPA approved Indiana's revised continuous monitoring requirements for applicable air pollutants at 326 IAC 3-5 as part of its federally enforceable SIP. See 74 Fed. Reg. 68541.

New Source Performance Standards

5. Section 111 of the CAA, 42 U.S.C. § 7411, requires the Administrator of the EPA to establish federal standards of performance for new sources within the list of categories of stationary sources.

6. 40 C.F.R. Part 60 sets forth the standards of performance for new stationary sources pursuant to Section 111 of the CAA.

7. 40 C.F.R. § 60.1(c) states that in addition to complying with the provisions of 40 C.F.R. Part 60, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized state air pollution control agency or by EPA pursuant to Title V of the CAA.

8. 40 C.F.R. Part 60, Subpart D sets forth the standards of performance for Fossil-Fuel-Fired Steam Generators for which construction is commenced after August 17, 1971.

Title V (Part 70) Operating Permits

9. Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), requires the Administrator of the EPA to promulgate regulations which establish the minimum elements of a permit program to be administered by any air pollution control agency.

10. 40 C.F.R. Part 70 provides for the establishment of comprehensive state air quality permitting systems consistent with the requirements of Title V of the CAA.

11. 40 C.F.R. Part 70, Appendix A, provides the approval status of Indiana's operating permit program. Indiana was granted final full approval of its operating permit program on November 20, 2001. *See* 66 Fed. Reg. 62969 (December 4, 2001). *See also* 326 IAC 2-7.

12. Under Section 113(a)(1) of the CAA, 42 U.S.C. § 7413 (a)(1), the Administrator of EPA may issue an order requiring compliance to any person who has violated or is violating a SIP. Under Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), the Administrator of EPA may issue an order requiring compliance to any person who has violated or is violating the New Source Performance Standards (NSPS) regulations. The Administrator has delegated this authority to the Director of the Air and Radiation Division.

13. Under Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1), the Administrator of EPA may require any person who owns or operates an emission source to make reports; install, use and maintain monitoring equipment; sample emissions; and provide such other information required by the Administrator. The Administrator has delegated this authority to the Director of the Air and Radiation Division.

Findings

14. Simultaneous to this Order, the parties entered into a Consent Agreement and Final Order (CAFO) to settle the civil penalties associated with the violations alleged in the CAFO. Like the CAFO, Duke neither admits nor denies the factual allegations and assertions in this Order.

15. Duke owns¹ and operates a stationary Electric Utility Generating Station, located at 1097 N Country Road 950 W, Owensville, Indiana 47665 in Gibson County (Gibson Station).

16. Duke is a person as defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

17. Gibson Station is a major source as that term is defined in 40 C.F.R. § 70.2. *See also* 326 IAC 2-7-1(22) and Section A.4 of Duke's 2004 and 2009 Part 70 Operating Permits.

¹ Gibson Station Unit 5 is co-owned by Duke and other entities. Solely for purposes of this ACO and for convenience of reference, these entities will collectively be referenced as Duke.

18. The following fossil fueled steam generating units are operating at Gibson Station:

- a. One dry bottom, pulverized coal-fired boiler, with a nominal heat input capacity of 5875 MMBtu/hr, which commenced construction prior to August 17, 1971 (Unit 1).
- b. One dry bottom, pulverized coal-fired boiler, with a nominal heat input capacity of 5875 MMBtu/hr, which commenced construction prior to August 17, 1971 (Unit 2).
- c. One dry bottom, pulverized coal-fired boiler, with a nominal heat input capacity of 5897 MMBtu/hr, which commenced construction prior to August 17, 1971 (Unit 3).
- d. One dry bottom, pulverized coal-fired boiler, with a nominal heat input capacity of 5897 MMBtu/hr, which commenced construction prior to August 17, 1971 (Unit 4).
- e. One dry bottom, pulverized coal-fired boiler, with a nominal heat input capacity of 5900 MMBtu/hr, installed in 1982 (Unit 5).

Continuous Monitoring of Opacity

19. Duke is required to continuously monitor opacity at Units 1 through 5 at Gibson Station because each unit is a fossil fuel-fired generator of greater than 100 MMBtu/hr heat input capacity. *See* 326 IAC 3-5-1(b)(2).

20. Duke is required to continuously monitor opacity at Unit 5 at Gibson Station because Unit 5 is a fossil fuel-fired generator of greater than 250 MMBtu/hr heat input capacity. *See* 40 C.F.R. § 60.45(a).

21. Duke installed, certified, maintains, and operates a continuous opacity monitoring system (COMS) at each of the five emission units. The COMS continuously measures opacity emitted by each emissions unit.

Part 70 Operating Permits and NSPS Requirements

22. Units 1 through 5 of Gibson Station are subject to Indiana's opacity regulations which are a part of Indiana's federally enforceable SIP.

23. Unit 5 of Gibson Station is subject to standards of performance for new sources, as set forth in 40 C.F.R. Part 60, Subpart D.

24. Duke is required to have a Title V permit for Gibson Station because it is a major source and subject to Section 111 of the CAA, in accordance with 40 C.F.R. Part 70.

25. On July 7, 2004, Indiana Department of Environmental Management (IDEM) issued a Part 70 Operating Permit to PSI Energy, Inc., (which later became Duke), for Gibson Station, Operation Permit No. T 051-7175-00013 (expired July 7, 2009) (hereinafter 2004 Permit).

26. On June 8, 2009, IDEM renewed Respondent's Part 70 Operating Permit for Gibson Station, Operation Permit Renewal No. T 051-27086-00013 (expired June 8, 2014) (hereinafter 2009 Permit).

27. Duke was authorized to operate Gibson Station subject to the conditions contained in its 2004 and 2009 Permits.

28. Section C.2 of both the 2004 and 2009 Permits sets forth opacity limitations for Units 1 through 4, with the exception of temporary alternative opacity limitations (TAOLs) set forth in Section D of the permits.

29. Section D.5.1 of both the 2004 and 2009 Permits set forth opacity limitations for Unit 5, with the exception of TAOLs.

30. Unit 5 is an "emission source" within the meaning of Section 114(a)(1) of the CAA, 42 U.S.C. § 7414(a)(1).

Prefiling Documents

31. On or about June 23, 2011 and July 16, 2013, EPA issued NOV's to Duke, alleging that Duke violated the CAA, its implementing regulations, the Indiana SIP, and its 2004 and 2009 Permits by exceeding its opacity limitations at Units 1 through 5 from 2007 through 2013.

32. EPA also sent a copy of the June 23, 2011 and July 16, 2013 NOV's to IDEM.

Compliance Program

33. "Particulate Matter" (PM) means total filterable particulate matter, measured in accordance with the provisions of this Administrative Consent Order (ACO or Order).

34. "Particulate Matter Continuous Emission Monitoring System" (PM CEMS) means, for obligations involving the monitoring of PM emissions under this ACO, all of the equipment used to sample, analyze, and provide a permanent electronic and/or paper record of PM emissions.

Immediate Compliance

35. Duke shall immediately and at all times thereafter to the extent practical, operate its pollution control equipment to maintain compliance with each unit's PM emission limits in accordance with all applicable requirements, including without limitation to those outlined in 40 C.F.R. § 60.11 and the Station's Title V Permit.

Installation of PM CEMS at Units 1 through 5

36. On or before December 31, 2014, Duke shall install PM CEMS at each of the fossil fueled steam generating units at Gibson Station (Units 1 through 5). These installations must occur in a location where representative measurements of PM emissions can be obtained and in accordance with applicable requirements, including without limitation 40 C.F.R Part 60,

40 C.F.R. Part 60, Appendix B, Performance Specification (PS) 11 and the Indiana SIP (326 IAC 3-5-1).

Operation of PM CEMS at Units 1 through 4

37. On or before January 1, 2015, Duke shall certify, operate, maintain, and perform periodic quality assurance/quality control activities on the PM CEMS at Units 1 through 4 at Gibson Station in accordance with all applicable requirements, including without limitation to those outlined in 40 C.F.R. § 60.13; 40 C.F.R. Part 60, Appendix B, PS 11 and Appendix F, Procedure 2; and the Indiana SIP (326 IAC 3-5-1).

Operation of PM CEMS at Unit 5

38. On or before April 17, 2016, Duke shall certify, operate, maintain, and perform periodic quality assurance/quality control activities on the PM CEMS at Unit 5 at Gibson Station in accordance with all applicable requirements, including without limitation to those outlined in 40 C.F.R. § 60.13; 40 C.F.R. Part 60, Subpart D, 40 C.F.R. Part 60, Appendix B, PS 11 and Appendix F, Procedure 2; and the Indiana SIP (326 IAC 3-5-1).

Quarterly Stack Tests at Unit 5

39. During the first quarter commencing on January 1, 2015, and proceeding on a quarterly basis until such time as Duke has completed the certification and initiates the maintenance and operation of the PM CEMS at Unit 5 of Gibson Station, Duke shall conduct stack tests for PM at Unit 5 in accordance with 40 C.F.R. Part 60, Appendix A-3, Method 5B (EPA Method 5B) (filterable portion only).

- a. Each stack test shall consist of three separate runs performed at no less than 95% of the permitted maximum capacity or under conditions of worse case emissions and shall not include periods of startup, shutdown, or malfunction.

- b. The sampling time for each run shall be at least 60 minutes and the volume of each run shall be at least 0.85 dry standard cubic meters.
- c. The PM emission rate from the stack test results must be calculated in accordance with 40 C.F.R. § 60.8(f).
- d. The results of each PM stack test shall be submitted to EPA within 60 days of completion of each test.

PM CEMS Requirements

40. The PM CEMS shall comprise a continuous particle mass monitor measuring filterable particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units expressed in lb/mmBTU. The PM CEMS installed at each Unit must be appropriate for the anticipated stack conditions and capable of measuring filterable PM concentrations on an hourly average basis.

41. The PM CEMS shall be operated in accordance with all applicable requirements, including those outlined in 40 C.F.R. § 60.13.

PM CEMS Recordkeeping and Reporting Requirements

42. No later than October 31, 2014, Duke shall submit to IDEM for review a monitoring plan for the installation, certification, maintenance and operation of each PM CEMS at Units 1 through 4. A copy of this submission shall be provided to EPA.

43. No later than October 31, 2014, Duke shall submit to IDEM for review a quality assurance/quality control (QA/QC) protocol for PM CEMS at each of Units 1 through 4, which shall include the criteria set forth in 40 C.F.R. Part 60, Appendix F, Procedure 2, Section 9.0 and the Indiana SIP. A copy of this submission shall be provided to EPA

44. No later than December 31, 2015, Duke shall submit to IDEM for review a monitoring plan for the installation, certification, maintenance and operation of the PM CEMS at Unit 5. A copy of this submission shall be provided to EPA.

45. No later than December 31, 2015, Duke shall submit to IDEM for review a QA/QC protocol for the PM CEMS at Unit 5, which shall include the criteria set forth in 40 C.F.R. Part 60, Appendix F, Procedure 2, Section 9.0 and the Indiana SIP. A copy of this submission shall be provided to EPA.

46. Duke shall operate each PM CEMS in accordance with the final plan and QA/QC protocol submitted to IDEM.

47. Duke shall submit excess emissions and monitoring system performance reports for each PM CEMS in accordance with all applicable regulations, the Indiana SIP and Duke's applicable permits at Gibson Station. Such reports will include the information required by 40 C.F.R. § 60.7. Copies of such reports shall be submitted to EPA.

48. For purposes of the excess emissions and monitoring system performance reports, an excess emission is a period of time where PM emissions (using PM CEMS data), exceed applicable limits (across respective averaging times) as specified in the Gibson Station Title V Permit and any applicable regulations, including 40 C.F.R. Part 60.

49. Duke shall notify EPA in writing when each PM CEMS is installed at each unit.

50. Duke shall submit a final report for the initial certifications of each PM CEMS to IDEM, with a copy also being submitted to EPA. These reports will include all relevant stack testing data, data collection, executive summaries, process data, and other information collected and recorded during the certification testing under 40 C.F.R. Part 60, Appendix B, PS

51. Duke shall send all notifications and reports required by this Order to:

Attention: Compliance Tracker (AE-17J)
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency, Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

General Provisions

52. If an event occurs or does not occur (*e.g.*, timely approval of a Title V Permit modification, SIP approval, etc.) which causes or may cause a delay of compliance with any provision of this Order and which is beyond the reasonable control of Duke, its contractors, or any entity controlled by Duke, Duke shall:

- a. Notify EPA in writing within 14 days after learning of an event which caused or may cause a delay. The notice must describe the anticipated length of the delay, its cause(s), Duke's past and proposed actions to prevent or minimize the delay and a schedule to carry out those actions. Duke must take all reasonable actions to avoid or minimize any delay. If Duke fails to notify EPA according to this paragraph, Duke may or may not receive an extension of time to achieve compliance
- b. Within 30 days of receiving notice under the previous subsection, EPA shall notify Duke in writing of any disagreement it has that circumstances beyond the reasonable control of Duke caused or may cause a delay in the performance of an obligation under this Order.
- c. If the parties agree that circumstances beyond the reasonable control of Duke caused or may cause a delay in the performance of an obligation under this Order, the parties will stipulate to an extension of time no longer than the period of delay.

- d. Duke has the burden of proving that circumstances beyond its control caused or may cause a delay in the performance of an obligation under this Order. Increased costs for complying with the requirements of this Order will not be a basis for an extension of time under the preceding subparagraph. Delay in complying with an interim requirement may or may not justify or excuse delay in compliance with subsequent requirements.

53. This Order does not affect Duke's responsibility to comply with other federal, state and local laws.

54. This Order does not restrict EPA's authority to enforce any other section of the CAA.

55. Nothing in this Order is intended to, or shall, alter or waive any applicable law concerning the use of data for any purpose under the CAA.

56. Nothing in this Order limits the EPA's authority to seek appropriate relief, including penalties, under Section 113 of the CAA, 42 U.S.C. § 7413, for Duke's violations of the CAA, its implementing regulations, the SIP or its Permits.

57. Failure to comply with this Order may subject Duke to penalties of up to \$37,500 per day for each violation under Section 113 of the CAA, 42 U.S.C. § 7413, and 40 C.F.R. Part 19.

58. The terms of this Order are binding on Duke, its assignees and successors. Duke must give notice of this Order to any successors in interest prior to transferring ownership. Within 30 days after a transfer of ownership occurs, Duke shall verify to EPA that it provided the above referenced notice to the transferee.

59. For the portion of the Order issued pursuant to Section 114(a) of the CAA, Duke may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information it submits to EPA. Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If Duke fails to assert a business confidentiality claim, EPA may make all submitted information available, without further notice, to any member of the public who requests it. Emission data provided under this Order or Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, Subpart B. “Emission data” is defined at 40 C.F.R. § 2.301 and includes, but is not limited to, all PM emission data submitted in response to this ACO.

60. This order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation. To aid in EPA’s electronic recordkeeping efforts, Duke is requested to furnish an electronic copy on physical media such as compact disk, flash drive or other similar item. If it is not possible to submit the information electronically, Duke is requested to submit the response to this Order without staples; paper clips and binder clips, however, are acceptable.

61. EPA may use any information submitted under this Order in an administrative, civil judicial or criminal action.

62. Duke agrees to the terms of this Order. Duke waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review that Duke may have with respect to any issue of fact or law set forth in this ACO, including any right of judicial review under Section 307(b) of the CAA, 42 U.S.C. § 7606(b).

63. This Order is effective on the date of signature by the Director of the Air and Radiation Division. This Order will automatically terminate once: (a) all five PM CEMS have been installed, certified and begin operation; and (b) Duke has complied with all other terms of the Order. It is recognized that nothing in this ACO prohibits Gibson Station from complying with applicable PM or opacity requirements through other means or methods that are authorized by law or permit.

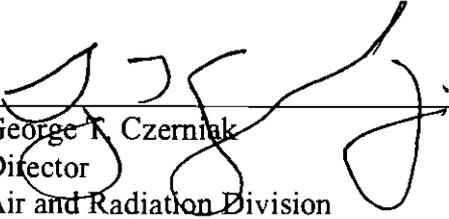
[Signature Page Follows]

10/14/14
Date



Steve Immel
Vice President, Midwest Regulated Operations
Duke Energy

10/30/14
Date



George F. Czerniak
Director
Air and Radiation Division
U.S. Environmental Protection Agency, Region 5

CERTIFICATE OF MAILING

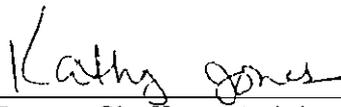
I, Loretta Shaffer, certify that I sent the Administrative Consent Order, EPA-5-15-113(a)-IN-01, by certified mail, return receipt requested, to:

Scott R. Alexander
Taft Stettinius & Hollister LLP
One Indiana Square, Suite 3500
Indianapolis, Indiana 46204-2023

I also certify that I sent a copy of the Administrative Consent Order, EPA-5-15-113(a)-IN-01, by first-class mail to:

Phil Perry, Branch Chief
Office of Air Quality / Compliance Branch
Indian Department of Environmental Management
100 North Senate Avenue / Room IGCN 1003
Indianapolis, Indiana 46204-2251

On the 4 day of November 2014.


for Loretta Shaffer, Administrative Program Assistant
AECAB, PAS

CERTIFIED MAIL RECEIPT
NUMBER:

7011 1150 0000 2639 3090