



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

JUN 2 2010

REPLY TO THE ATTENTION OF:  
(AE-17J)

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

Marc Divis, President  
Akron Energy Systems LLC  
226 Opportunity Parkway  
Akron, Ohio 44308

**Re: Notice of Violation and Finding of Violation**

Dear Mr. Divis:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation (NOV) and Finding of Violation (FOV) to Akron Energy Systems LLC under Section 113(a)(1) and (a)(3) of the Clean Air Act ("CAA"), 42 U.S.C. § 7413(a)(1) and (a)(3). We find that you are violating the Prevention of Significant Deterioration requirements under Section 165 of the CAA, 42 U.S.C. § 7475, Sections 502 and 503 of Title V of the CAA, 42 U.S.C. §§ 7661a-7661b, the Ohio State Implementation Plan, and the Standards of Performance for New Sources under Section 111 of the CAA, 42 U.S.C. § 7511, and 40 C.F.R. Subparts A and Db at your Akron, Ohio facility.

Section 113 of the Clean Air Act gives us several enforcement options.

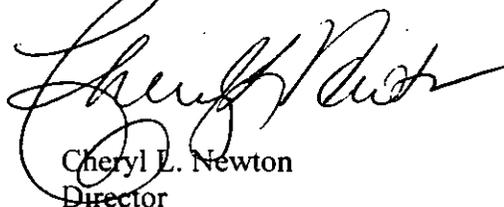
We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference if you choose.

The contacts in this matter are Erik Hardin, Environmental Scientist, and Catherine Garypie, Associate Regional Counsel. You may call them at (312) 886-2402 and (312) 886-5825, respectively, to request a conference. You should make the request

as soon as possible, but no later than 10 calendar days after you receive this letter. We should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Cheryl L. Newton". The signature is fluid and cursive, with a large initial "C".

Cheryl L. Newton  
Director  
Air and Radiation Division

cc: Robert Hodanbosi, Chief  
Ohio Environmental Protection Agency

Lynn Malcolm, Administrator  
Akron Regional Air Quality Management District

Terrence S. Finn, Esq.  
Roetzel & Andress  
222 South Main Street  
Akron, OH 44308



3. Construction or modification is “commenced” when an owner or operator of a stationary source undertakes “a continuous program of construction or modification,” or enters into a “contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.” 40 C.F.R. § 60.2.
4. Section 111(a)(4) of the Act, 42 U.S.C. § 7411(a)(4), defines “modification,” in pertinent part, as “any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source . . .” This definition requires that the physical or operational change result in an increase in the emission rate to the atmosphere of any pollutant for which a standard applies. 40 C.F.R. § 60.14(a). An emission rate increase is calculated by comparing the hourly emission rate, at maximum physical capacity, before and after the physical or operational change. 40 C.F.R. § 60.14(b).
5. 40 C.F.R. § 60.14(g) requires a modified stationary source to comply with all applicable standards within 180 days from the completion of any physical or operational change.
6. EPA promulgated 40 C.F.R. Part 60 Subpart Db – Standards of Performance for Industrial Commercial Steam Generating Units (40 C.F.R. §§ 60.40b - 60.49b) on December 16, 1987. 52 Fed. Reg. 47842 (December 16, 1987).
7. 40 C.F.R. § 60.40b(a) states that the affected facility to which Subpart Db applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour).
8. 40 C.F.R. § 60.41b defines “steam generating unit” to mean a device that combusts any fuel or byproduct/waste to produce steam or to heat water or any other heat transfer medium.
9. 40 C.F.R. § 60.41b defines “spreader stoker steam generating unit” to mean a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.
10. 40 C.F.R. § 60.41b defines “coal” to mean all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388–77, 90, 91, 95, or 98a, Standard Specification for Classification of Coals by Rank, coal refuse, and petroleum coke. Coal derived synthetic fuels, including but not limited to solvent refined coal, gasified coal, coal oil mixtures, and coal water mixtures, are also included in this definition.

11. 40 C.F.R. § 60.42b(a) provides that the owner or operator of a Subpart Db affected facility that combusts exclusively coal shall not cause to be discharged into the atmosphere any gases that contain sulfur dioxide (SO<sub>2</sub>) in excess of 87 ng/J (0.20 lb/million Btu) or 10 percent (0.10) of the potential sulfur dioxide emission rate (90 percent reduction) and that contain sulfur dioxide in excess of the emission limit determined by a specified formula, which for coal results in 520 ng/J (1.2 lb/million Btu) heat input.
12. 40 C.F.R. § 60.43b(a) and (f) provide that no owner or operator of a Subpart Db affected facility which combusts exclusively coal shall cause to be discharged into the atmosphere from that affected facility any gases that contain particulate matter (PM) in excess of 22 ng/J (0.051 lb/million Btu) heat input or 20 percent opacity (6 minute average), except for one 6 minute period per hour of not more than 27 percent opacity.
13. 40 C.F.R. § 60.44b(a) provides that no owner or operator of a Subpart Db affected facility that combusts only coal from a spreader stoker steam generating unit shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (NO<sub>x</sub>) (expressed as NO<sub>2</sub>) in excess of 260 ng/J (0.60 lb/million Btu) heat input.
14. 40 C.F.R. § 60.47b(a) requires the owner or operator of a Subpart Db affected facility which is required to comply with 40 C.F.R. § 60.42b to install, calibrate, maintain, operate, and record the output of a continuous emission monitoring system (CEMS) for measuring SO<sub>2</sub> and either oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) at the inlet and outlet of the SO<sub>2</sub> control device for units complying with the percent reduction standards. As an alternative to operating CEMS, an owner or operator may elect to determine the average sulfur dioxide emissions and percent reduction using the procedures described in 40 C.F.R. § 60.47b(b).
15. 40 C.F.R. § 60.48b(b)(1) requires the owner or operator of a Subpart Db affected facility to install, calibrate, maintain, and operate a CEMS for measuring NO<sub>x</sub> to the atmosphere, and record the output of the system.
16. 40 C.F.R. § 60.49b requires the owner or operator of a Subpart Db affected facility to maintain certain records and make certain reports to EPA.

#### Prevention of Significant Deterioration

17. On June 19, 1978, EPA promulgated the prevention of significant deterioration (PSD) of air quality standards pursuant to Part C of Title I of the Act. 43 Fed. Reg. 26403 (June 19, 1978). The PSD regulations were revised on August 7, 1980 (45 Fed. Reg. 52676) in response to a decision of the U.S. Court of Appeals for the D.C. Circuit. These regulations are codified at 40 C.F.R. § 52.21 in the 1999 edition of the C.F.R. Subsequent to 1980, the PSD regulations have been repeatedly revised.

18. The authority to implement the federal PSD regulations was delegated to the State of Ohio in a letter from EPA dated May 1, 1980, and thereby incorporated into the Ohio SIP. 40 C.F.R. § 52.1884 and 46 Fed. Reg. 9580 (January 29, 1981).
19. On October 10, 2001, EPA conditionally approved the Ohio SIP for PSD provisions for attainment areas. 66 Fed. Reg. 51570 (October 10, 2001). Ohio EPA's PSD program was finally approved as part of the SIP on January 22, 2003 (68 Fed. Reg. 2909). At that time, Ohio's PSD program was located in Ohio Administrative Code (OAC) 3745-31-01 through 3745-31-20. These rules mirrored the federal PSD regulations codified in 40 C.F.R. § 52.21 in the 1999 edition of the C.F.R.
20. Facilities in Ohio were required to comply with the federal PSD program prior to October 10, 2001. Facilities in Ohio are required to comply with the Ohio PSD program on and after October 10, 2001. Ohio EPA's PSD program was significantly changed and approved as part of the SIP on February 25, 2010 (75 FR 8496).
21. 40 C.F.R. § 52.21(b)(1)(i)(a) (1999) defines a "major stationary source" as any stationary source within one of 28 source categories which emits, or has the potential to emit, 100 tons per year or more of any air pollutant subject to regulation under the Act. Stationary sources with fossil fuel boilers (or combinations thereof) totaling more than 250 million BTU per hour heat input are included among the 28 source categories.
22. 40 C.F.R. § 52.21(b)(2)(i) (1999) defines a "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.
23. 40 C.F.R. § 52.21(b)(3)(i) (1999) defines "net emissions increase" as the amount by which the sum of the following exceeds zero:
  - (a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and
  - (b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.
24. 40 C.F.R. § 52.21(b)(21) (1999) defines "actual emissions" and states that for any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit (PTE) of the unit on that date. 40 C.F.R. § 52.21(b)(21)(iv)(1999).

25. 40 C.F.R. § 52.21(b)(23) (1999) defines “significant” and states that in reference to NO<sub>x</sub>, SO<sub>2</sub>, PM, and carbon monoxide (CO), significant net emissions increase means an potential emissions rate that would equal or exceed 40 tons or more per year of NO<sub>x</sub>, 40 tons or more per year of SO<sub>2</sub>, 25 tons or more per year of PM, and 100 tons or more per year of CO. 40 C.F.R. § 52.21(b)(23)(i) (1999).
26. An applicant for a permit to modify a stationary source is required to submit all information necessary to allow the permitting authority to perform any analysis or make any determination required in order to issue the appropriate permit. 40 C.F.R. § 52.21(n) (1999).
27. Any owner or operator of a source or modification subject to 40 C.F.R. § 52.21(1999) who commences construction after the effective date of the PSD regulations without applying for and receiving a PSD permit, shall be subject to appropriate enforcement action. 40 C.F.R. § 52.21(r)(1) (1999).
28. 40 C.F.R. § 52.21(i) (1999) prohibits the construction of any new major stationary source or any major modification without a permit which states that the source or modification would meet the requirements of 40 C.F.R. § 52.21(j) through (r), which include, inter alia, that a source subject to PSD regulations undergo a control technology review, install Best Available Control technology (BACT), and conduct air quality modeling. 40 C.F.R. §§ 52.21(j)-(r) (1999).

#### Requirements for SIP Permits to Install

29. Section 110 of the Act, 42 U.S.C. § 7410, requires each state to adopt and submit to EPA for approval a State Implementation Plan (SIP) that provides for the maintenance, implementation and enforcement of the National Ambient Air Quality Standards (NAAQS). Under Section 110(a)(2) of the Act, 42 U.S.C. § 7410(a)(2), each SIP must include a permit program to regulate the modification and construction of any stationary source of air pollution as necessary to assure that NAAQS are achieved. Pursuant to Section 113(a) and (b) of the Act, 42 U.S.C. § 7413(a) and (b), upon EPA approval, SIP requirements are federally enforceable under Section 113. 40 C.F.R. § 52.23.
30. Section 161 of the Act requires that each applicable SIP contain emission limitations and such other measures as may be necessary to prevent significant deterioration (PSD) of air quality in each region designated as attainment or unclassifiable. 40 C.F.R. 51.165 and 51.166 contain the requirements for a PSD permitting program.
31. EPA originally approved the Ohio Environmental Protection Agency’s permit to install (PTI) rules, OAC 3745-31, as part of the federally enforceable Ohio SIP on October 31, 1980 (45 Fed. Reg. 72119). Since then, EPA has approved several revisions to OAC 3745-31 into the federally enforceable SIP.

32. The most recent revisions to OAC 3745-31 include Ohio EPA's rules for the PSD permitting program in its approved SIP. The PSD portion of Ohio's SIP consists of OAC sections 3745-31-11 to 3745-31-20. The PSD portion of Ohio's SIP also includes general provisions applying to both attainment and nonattainment areas in the form of OAC sections 3745-31-01 to 3745-31-10.
33. OAC Rule 3745-31-02(A) states that no person shall cause, permit, or allow the installation of a new source of air pollutants or allow the modification of an air containment source without first obtaining a PTI from the director of the Ohio EPA.
34. OAC 3745-31-05(A)(2) provides that the director shall issue a permit to install if he determines, among other things, that the modification will not result in a violations of applicable laws such as those in 3745-31-10 to 3745-31-20 containing requirements pertaining to installation of major modifications in attainment areas or NSPS.
35. OAC 3745-31-05(A)(3) states that the director of the Ohio EPA will issue a PTI only if he determines that the installation or modification and operation of the air contaminant source will employ best available technology (BAT).
36. OAC 3745-31-15(D) states that the owner or operator of a new major modification shall apply best available control technology (BACT) for each regulated air pollutant that would be a significant net emissions increase at the stationary source.
37. OAC 3745-31-16(B) states that any owner or operator of a proposed major stationary source or major modification shall demonstrate that allowable emissions increases from the proposed major stationary source or major modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of: (1) Any national ambient air quality standard; or (2) Any applicable maximum allowable increase over the baseline concentration (allowable increment) in any attainment area.

#### Requirements for Title V Operating Permits

38. Section 502(a) of the CAA, 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 CAA, no source subject to Title V may operate except in compliance with a Title V permit.
39. 40 C.F.R. § 70.1(b) provides that all sources subject to the Part 70 regulations shall have a permit to operate that assures compliance by the source with all applicable requirements.

40. 40 C.F.R. § 70.7(b) provides that no source subject to Part 70 requirements may operate without a permit issued under a Part 70 program.
41. EPA fully approved the Ohio Title V program, effective October 1, 1995. 60 Fed. Reg. 42045 (August 15, 1995). Ohio's Title V permit requirements are codified at OAC 3745-77.
42. OAC 3745-77-02(A) prohibits operation of a source subject to Title V permitting requirements without a permit issued under Chapter 3745-77. OAC 3745-77-02(A)(1) requires that each Title V permit shall include emission limits and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance.
43. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), authorizes the Administrator to initiate an enforcement action whenever, among other things, the Administrator finds that any person has violated or is in violation of a requirement or prohibition of Title V of the CAA, or any rule promulgated, issued or approved under Title V of the CAA.

#### **Factual Background**

44. The City of Akron owns the district steam heating plant (the facility) at 226 Opportunity Parkway, Akron, Ohio. On approximately September 8, 2009, AES began operating the facility under an Interim License and Operating Agreement with the City of Akron. A company named Akron Thermal Limited Partnership LLP ("Akron Thermal") operated the facility before AES, from approximately August 4, 1995, to September 8, 2009. This facility consists of the Akron Recycle Energy Systems (RES) Facility and the former B.F. Goodrich powerhouse, also known as the Annex Facility, which is located directly across the Ohio and Erie Canal from the RES Facility.
45. Five boilers with a combined heat input of 1027 million Btu/hr are operated at the facility. Included among these five boilers is Boiler #32 (Ohio EPA identification number B001), a 220 million BTU/hr heat input capacity spreader stoker coal fired boiler equipped with a multiclone and a two field electrostatic precipitator. Boiler #32 is located at the Annex Facility.
46. Akron Thermal operated Boiler #32 using coal from approximately November 1995 to September 8, 2009. Akron Thermal shutdown Boiler #32 when it stopped operating the facility on September 8, 2009. On September 29, 2009, AES began operating Boiler #32 using coal.
47. Boiler #32 meets the definition of "steam generating unit" in 40 C.F.R. § 60.41b and has a heat input capacity greater than 100 million BTU/hr.

48. Boiler #32 meets the definition of “spreader stoker steam generating unit” in 40 C.F.R. § 60.41b. Boiler #32 is fired with “coal” as defined in 40 C.F.R. § 60.41b.
49. Boiler #32 was shutdown in or about November 1988. This shutdown was intended to be permanent.
50. After 1988, Boiler #32 was not maintained as necessary to keep it operational. As a result, it deteriorated to the point where it was inoperable.
51. In 1995, several estimates were prepared for reactivating Boiler #32. These estimates indicate that major work would be required to reactivate Boiler #32, taking several months to complete and costing several million dollars.
52. A reactivation project was conducted on Boiler #32 between August 4, 1995, and November 4, 1995. Boiler #32 began operating shortly thereafter.
53. As a result of the 1995 Boiler #32 reactivation project, the maximum emission rate of SO<sub>2</sub>, PM, and NO<sub>x</sub> to the atmosphere from Boiler #32, expressed in kg/hr, each increased.
54. The 1995 Boiler #32 reactivation project caused a significant net emission increase of SO<sub>2</sub> and NO<sub>x</sub> each greater than 40 tons per year, PM greater than 25 tons per year, and CO greater than 100 tons per year. In addition, the facility did not have any contemporaneous and creditable emission decreases at the time of the reactivation project.
55. The facility meets the definition of “major stationary source” in 40 C.F.R. § 52.21(b)(1)(i)(a), because it has fossil fuel boilers that have a combined heat input greater than 250 million BTU/hr, and it has the potential to emit in excess of 100 tons of NO<sub>x</sub>, CO, and SO<sub>2</sub> per year.
56. The facility is subject to the PSD regulations in the Ohio SIP, and the requirements to obtain PSD permits to install incorporating such PSD requirements, as required by the CAA and the Ohio SIP rules.
57. The facility is subject to Title V of the CAA (Sections 502 and 503) because it is a major source (as defined in Section 501(2) of the CAA) with the potential to emit more than 100 tons of NO<sub>x</sub>, CO, and SO<sub>2</sub> per year.
58. The State of Ohio issued a Title V permit to Akron Thermal on February 4, 1999. This permit has not been transferred to AES, and the State of Ohio has not issued any subsequent permits for the facility.

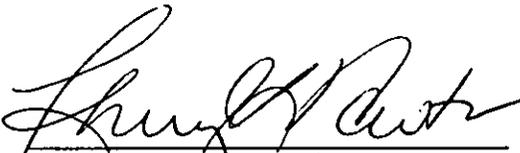
59. Boiler #32 is not equipped with the pollution control equipment and/or operated with the type of coal necessary to comply with the NSPS SO<sub>2</sub> standards in 40 C.F.R. § 60.42b(a).
60. Boiler #32 is not equipped with a NO<sub>x</sub> or SO<sub>2</sub> CEMS.

#### Violations

61. The 1995 Boiler #32 reactivation project conducted at the facility triggered NSPS “modification” provisions in 40 C.F.R. § 60.14. As a result, Boiler #32 is subject to 40 C.F.R. Part 60 Subparts A and Db.
62. The SO<sub>2</sub> emissions from Boiler #32 continually exceed the emission limit in 40 C.F.R. § 60.42b, and this boiler is not equipped with SO<sub>2</sub> emission control equipment.
63. Boiler #32 is not equipped with a properly installed, calibrated, maintained, and operated CEMS for measuring SO<sub>2</sub> and either O<sub>2</sub> or CO<sub>2</sub>, in violation of 40 C.F.R. § 60.47b.
64. Boiler #32 is not equipped with a properly installed, calibrated, maintained, and operated CEMS for measuring NO<sub>x</sub>, in violation of 40 C.F.R. § 60.48b(b)(1).
65. AES has not maintained necessary records to the EPA required by 40 C.F.R. § 60.49b.
66. The violations in Paragraphs 61 through 65 continue from at least the date on which the reactivation project started through the present until such time as AES complies with the applicable provisions of 40 C.F.R. Part 60, Subparts A and Db.
67. The 1995 Boiler #32 reactivation project caused emissions of SO<sub>2</sub>, NO<sub>x</sub>, PM, and CO to increase above the significance level for each pollutant, resulting in a “major modification” as defined in 40 C.F.R. § 52.21(b)(2)(1999).
68. None of the facility’s owners or operators, including but not limited to AES, have obtained a PSD permit or undergone PSD review for the Boiler #32 reactivation, including applying BACT, prior to beginning actual construction, in violation of 40 C.F.R. Part 52 (1999).
69. None of the facility’s owners or operators, including but not limited to AES, have obtained a permit to install or undergone PSD review, including applying BACT, for the Boiler #32 reactivation, in violation of OAC Chapter 3745-31.
70. The violations noted in paragraphs 67 through 69 exist from at least the date of start of construction and will continue until the appropriate permits are obtained and the necessary pollution control equipment is installed and operated.

71. AES failed to obtain a Title V permit for the facility prior to operating the facility, and AES continues to operate the facility, in violation of the Section 504 of the CAA, 40 C.F.R. § 70.1(b), and OAC 3745-77-02(A)(1).
72. The violation noted in paragraph 71 exists from at least September 8, 2009, and will continue until AES obtains a Title V permit that assures compliance with all applicable requirements of the CAA.

6/2/10  
Date

  
Cheryl L. Newton  
Director  
Air and Radiation Division

## CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-10-OH-14, by Certified Mail, Return Receipt Requested, to:

Marc Divis, President  
Akron Energy Systems LLC  
226 Opportunity Parkway  
Akron, Ohio 44308

and

Terrence S. Finn, Esq.  
Roetzel & Andress  
222 South Main Street  
Akron, Ohio 44308

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

Robert Hodanbosi, Chief  
Division of Air Pollution Control  
Ohio Environmental Protection Agency  
Lazarus Government Center  
P.O. 1049  
Columbus, Ohio 43216 1049

and

Frank Markunas, Administrator  
Akron Regional Air Quality Management District  
146 South High St. Room 904  
Akron, Ohio 44308

On the 3<sup>rd</sup> day of JUNE, 2010.

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0192 0539