



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

SEP 29 2015

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Steven Zervas
Environmental Manager
EES Coke Battery, L.L.C.
P.O. Box 18309
River Rouge, Michigan 48218

Re: Finding of Violation
EES Coke Battery, L.L.C.
River Rouge, Michigan

Dear Mr. Zervas:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to EES Coke Battery, L.L.C. (EES or you) under Sections 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3). We find that you are violating the following at your coke by-product recovery plant in River Rouge, Michigan: (1) National Emission Standards for Hazardous Air Pollutant (NESHAP) from Benzene Waste Operations at 40 C.F.R. §§ 61.340-359 (Subpart FF) and (2) NESHAP for Equipment Leaks at 40 C.F.R. §§ 61.240-247 (Subpart V).

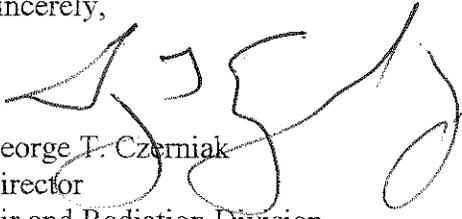
Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the 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. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

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. The EPA contact in this matter is Constantinos Loukeris. You may call him at (312) 353-6198 to request a conference. You should make the request within 10 calendar days

following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Czerniak', written over the typed name.

George T. Czerniak
Director
Air and Radiation Division

Enclosure

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)	
)	
EES Coke Battery, L.L.C)	FINDING OF VIOLATION
River Rouge, Michigan)	
)	
)	
Proceedings Pursuant to)	EPA-5-15-MI-03
the Clean Air Act,)	
42 U.S.C. §§ 7401 et seq.)	
)	

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that EES Coke Battery, L.L.C. (“EES”) is violating the Section 112 of the Clean Air Act (CAA), 42 U.S.C. § 7412 at its coke by-product recovery plant in River Rouge, Michigan. Specifically, we find that EES is violating the following: (1) National Emission Standards for Hazardous Air Pollutant (NESHAP) from Benzene Waste Operations at 40 C.F.R. §§ 61.340-359 (Subpart FF) and (2) NESHAP for Equipment Leaks at 40 C.F.R. §§ 61.240-247 (Subpart V).

Regulatory Authority

NESHAP from Benzene Waste Operations

1. Section 112 of the CAA, 42 U.S.C. § 7412, required EPA to promulgate national emission standards for certain categories of sources of hazardous air pollutants.
2. Benzene is a “hazardous air pollutant.” 42 U.S.C. § 7412(b)(1); 40 C.F.R. § 61.01(a).
3. EPA promulgated the NESHAP from Benzene Waste Operations at 40 C.F.R. §§ 61.340-359 on March 7, 1990. 55 Fed. Reg. 8,346.
4. The NESHAP from Benzene Waste Operations applies to, among others, owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries. 40 C.F.R. § 61.340(a).
5. Subpart FF at 40 C.F.R. § 61.342(a) states “an owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of paragraphs (b) and (c) of this section. The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other

wastes, at any time and the mixture has an annual average water content greater than 10 percent.”

6. Subpart FF at 40 C.F.R. § 61.355(a)(4)(ii) states “if the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.

NESHAP for Equipment Leaks

7. EPA promulgated the NEHSAP from Equipment Leaks at 40 C.F.R. §§ 61.240-247 on June 6, 1984. See 49 Fed. Reg. 23,513.
8. Subpart V at 40 C.F.R. § 61.240 (a) states “the provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart.”
9. Subpart V at 40 C.F.R. § 61.242-1(s) states “each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of 40 C.F.R. §§ 61.242-1 to 61.242-11 for each new and existing source as required in 40 C.F.R. § 61.05, except as provided in 40 C.F.R. §§ 61.243 and 61.244.”
10. Subpart V at 40 C.F.R. § 61.242-2(a)(1) states “each pump shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. § 61.245(b), except as provided in 40 C.F.R. § 61.242-1(c) and paragraphs (d), (e), (f) and (g) of this section.”
11. Subpart V at 40 C.F.R. § 61.242-2(a)(2) states “each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.”
12. Subpart V at 40 C.F.R. § 61.242-2(b)(1) states “if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.”
13. Subpart V at 40 C.F.R. § 61.242-7(a) states “each valve shall be monitored monthly to detect leaks by the method specified in 40 C.F.R. § 61.245(b) and shall comply with paragraphs (b)-(e), except as provided in paragraphs (f), (g), and (h) of this section, 40 C.F.R. § 61.243-1 or 40 C.F.R. § 61.243-2, and 40 C.F.R. § 61.242-1(c).”
14. Subpart V at 40 C.F.R. § 61.242-7(b) states “if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.”
15. Subpart V at 40 C.F.R. § 61.245(b) states “Monitoring, as required in §§ 61.242, 61.243, 61.244, and 61.135, shall comply with the following requirements:

- (1) Monitoring shall comply with Method 21 of Appendix A of 40 C.F.R. Part 60.
- (2) The detection instrument shall meet the performance criteria of Method 21.
- (3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
- (4) Calibration gases shall be:
 - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- (5) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.”

Findings of Fact

16. EES owns and operates the eighty-five coking ovens constituting the Number 5 Coke Oven Battery (No. 5 Battery) at the United States Steel Corporation (USS) Great Lakes Works Coke, Iron and Steel Works in River Rouge, Michigan.
17. EES also owns and operates a “coke by-product recovery plant,” as that term is defined by 40 C.F.R. § 61.341, which is located adjacent to the No. 5 Battery.
18. EES’s coke by-product recovery plant is a “facility,” as that term is defined by 40 C.F.R. § 61.341.
19. Subpart FF applies to EES’s coke by-product recovery plant.
20. Subpart V applies to EES’s coke by-product recovery plant.
21. EPA conducted an inspection of the coke by-product recovery plant on March 17-18, 2015 (March 2015 inspection).
22. EES performed sampling to determine the total annual benzene quantity at the coke by-product recovery plant in 2006.
23. In the most recent total annual benzene report for the facility submitted for calendar year 2014, EES reported a benzene quantity of 1.53 megagrams.
24. Since 2006, EES made a process change in the coke by-product recovery plant by ceasing operation of the phenol system.
25. As a result of March 2015 inspection, EPA identified the following missed weekly visual inspections on 10 pumps:

- a) December 23, 2012
- b) March 31, 2013
- c) September 8, 2013
- d) November 24, 2013
- e) February 16, 2014
- f) November 16, 2014
- g) November 30, 2014

- 26. EES's semi-annual reports under Subpart V for the period of January 2014 through December 2014 (dated July 22, 2014 and January 28, 2015) indicated that EES used 500 ppm of methane in air as the calibration gas standard on its Method 21 calibration forms.
- 27. EES's semi-annual report under Subpart V for the period of January 2012 through July 2012 (dated July 27, 2012) indicated that EES used 100 ppm of isobutylene as the calibration gas standard on its Method 21 calibration forms.
- 28. EES's semi-annual reports under Subpart V for the period of January 2012 through December 2013 (dated July 27, 2012, January 30, 2013, July 30, 2013 and January 23, 2014) indicated that EES used isobutylene as the calibration gas for performing Method 21.

Violations

- 29. EES failed to conduct all required weekly visual inspections on pumps, as set forth in paragraph 25, in violation of 40 C.F.R. § 61.242-2(a)(2).
- 30. EES failed to perform Method 21 properly on valves and pumps by not using methane or n-hexane as the calibration gas, as set forth in paragraphs 27-28, in violation of 40 C.F.R. §§ 61.242-2(a)(1), 61.242-7(a), and 61.245(b).
- 31. EES failed to perform Method 21 properly on valves and pumps by not using a 10,000 ppm calibration gas, as set forth in paragraph 26-27, in violation of 40 C.F.R. §§ 61.242-2(a)(1), 61.242-7(a), 61.245(b).
- 32. EES failed to repeat the determination of total annual benzene quantity since the removal of phenol system constituted a process change, as set forth in paragraph 24, in violation of 40 C.F.R. § 61.355(a)(4)(ii).

Enforcement Authority

- 33. Sections 113(a)(1) and (3) of the CAA, 42 U.S.C. § 7413(a)(1) and (3), provide that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any requirement or prohibition of, *inter alia*, an applicable SIP or permit, any rule promulgated under the NSPS requirements of Section 111(e) of the CAA, 42 U.S.C. § 7411(e), Title V of the CAA, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder, the Administrator may issue an administrative penalty order under Section 113(d), issue an

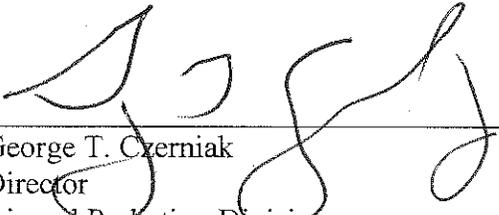
order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Environmental Impact of Violations

- 34. EES's above-referenced violations have caused excess emissions of benzene.
- 35. Benzene emissions, in acute (short-term) inhalation exposure of humans, may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure to benzene emissions has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidences of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene.

Date

9/29/15


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Finding of Violation, No. EPA-5-15-MI-03, by Certified Mail, Return Receipt Requested, to:

Steven Zervas
Environmental Manager
EES Coke Battery, L.L.C.
P.O. Box 18309
River Rouge, Michigan 48218

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

Thomas Hess, Enforcement Unit Chief
Michigan Department of Environmental Quality
Air Quality Division
Constitution Hall
525 W. Allegan Street
P.O. Box 30473
Lansing, Michigan 48909-7973

On the 30th day of September 2015.

Loretta Shaffer
Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER:

7014 2870 0001 9581 4397