



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

JUN 22 2012

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Steve Kelly
President
One Earth Energy, LLC
202 North Jordan Drive
Gibson City, Illinois 60936

Re: One Earth Energy, LLC Notice of Violation and Finding of Violation

Dear Mr. Kelly:

This is to advise you that the U.S. Environmental Protection Agency has determined that the One Earth Energy, LLC (One Earth) facility at 202 North Jordan Drive, Gibson City, Illinois (facility) is in violation of the Clean Air Act (CAA), 42 U.S.C. § 7401 *et seq.* and the associated state or local pollution control requirements. We are today issuing to you a Notice of Violation and Finding of Violation (NOV/FOV) for these violations.

The CAA requires the development of Primary and Secondary National Ambient Air Quality Standards to protect public health and welfare. To attain and maintain these standards, each state is required to develop an implementation plan. Illinois' State Implementation Plan (Illinois SIP) requires you to take reasonably available measures to prevent volatile organic compounds, nitrogen oxides, carbon monoxide, particulate matter, and hazardous air pollutants, including acetaldehyde, from emitting from the facility.

The CAA also requires the development of standards for the emissions of new sources, called New Source Performance Standards (NSPS). The purpose of the NSPS is to ensure that widely available pollution control technology is implemented as qualifying sources are constructed or modified.

EPA finds that at the facility there are violations of the following:

1. Illinois SIP requirements, including a construction permit and a federally enforceable state operating permit (FESOP). In violating the Illinois SIP requirements you are also violating Title I of the CAA and its implementing regulations, which require compliance with the terms and conditions of the Illinois SIP.
2. Section 111 of the CAA, 42 U.S.C. § 7411, the following NSPS Subparts:

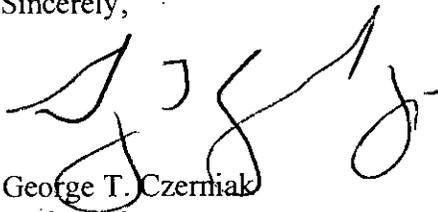
- Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
- Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action and bringing a judicial criminal action.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 days following receipt of this notice. A conference should be held within 30 days following receipt of this notice. This conference will provide you a chance to present information on the identified violations, 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 take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Dakota Prentice. You may call him at (312) 886-6761 or email him at prentice.dakota@epa.gov if you wish to request a conference. EPA hopes that this NOV/FOV will encourage One Earth's compliance with the requirements of the CAA.

Sincerely,



George T. Czerniak
Acting Director
Air and Radiation Division

Enclosure

cc: Ray Pilapil
Manager
Bureau of Air, Compliance and Enforcement Section
Illinois Environmental Protection Agency

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

One Earth Energy, LLC
Gibson City, Illinois

Proceedings Pursuant to
the Clean Air Act
42 USC § 7401 et seq.

)
)
)
)
)
)
)
)
)
)
)

**NOTICE OF VIOLATION AND
FINDING OF VIOLATION**

EPA-5-12-IL-11

NOTICE OF VIOLATION AND FINDING OF VIOLATION

One Earth Energy, LLC (you or One Earth) owns and operates an ethanol manufacturing facility at 202 North Jordan Drive, Gibson City, Illinois (the facility). At the facility, One Earth produces denatured ethanol from locally sourced corn.

The U.S. Environmental Protection Agency is sending this Notice of Violation and Finding of Violation (NOV/FOV or Notice) to notify you that we have found violations of the Clean Air Act (CAA) at the facility. More particularly, we have found violations of conditions specified in the Illinois State Implementation Plan (Illinois SIP), the New Source Performance Standards (NSPS), and the implementing regulations at 40 C.F.R. Part 60:

- Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (NSPS Subpart Db); and
- Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 (NSPS Subpart Kb).

Section 113 of the CAA provides you with the opportunity to request a conference with us to discuss the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

Statutory and Regulatory Provisions

Section 110(a)(1) of the CAA, 42 U.S.C. § 7410(a)(1), requires each state to adopt and submit to the EPA for approval a SIP that provides for the implementation, maintenance, and enforcement of the National Ambient Air Quality Standards (NAAQS). Under Section 110(a) of the CAA, 42

U.S.C. § 7410(a), 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 CAA, 42 U.S.C. § 7413(a) and (b), upon EPA approval, SIP requirements are federally enforceable under Section 113. Under 40 C.F.R. § 52.23, any permit limitation or condition contained within a permit issued under an EPA-approval program that is incorporated in a SIP, is a requirement of the SIP, and is federally enforceable under Section 113, 42 U.S.C. § 7413.

EPA promulgated approval of 35 Illinois Administrative Code (IAC) Part 201, "Permits and General Conditions," as part of the federally enforceable SIP for the State of Illinois on May 31, 1972. See 37 Fed. Reg. 10862. Since then, EPA has approved several revisions of 35 IAC Part 201 into the federally enforceable SIP.

1. The Illinois SIP permits and permit conditions relevant to this NOV/FOV are as follows:
 - a. The Illinois EPA (IEPA) issued a Construction Permit to the facility dated May 7, 2007.
 - b. EPA promulgated approval of the Illinois Federally Enforceable State Operating Program (FESOP) program on December 17, 1992. See 57 Fed. Reg. 59928. Illinois' FESOP program became effective on February 16, 1993.
 - c. The IEPA issued a FESOP to the facility dated January 25, 2011.
 - d. Construction Permit and FESOP conditions 2.2.5-2.b require the facility to operate the baghouses (Grain Unloading Baghouse and Hammermill Baghouse) with a pressure drop that is within a range that is consistent with manufacturer's recommended levels or that during emission testing demonstrated compliance with applicable requirements.
 - e. Construction Permit and FESOP condition 2.2.9.d requires the facility to maintain records of the differential pressure of each baghouse (Grain Unloading Baghouse and Hammermill Baghouse), recorded at least once per operating day.
 - f. Construction Permit and FESOP condition 2.6.5-1.a. requires the facility to operate the baghouses (Cooling Drum Baghouse and DDG Load-Out Baghouse) with a pressure drop that is within a range that is consistent with manufacturer's recommended levels or that during emission testing demonstrated compliance with applicable requirements.
 - g. Construction Permit and FESOP condition 2.6.9.b requires the facility to maintain records of the differential pressure of each baghouse (Cooling Drum Baghouse and DDG Load-Out Baghouse), recorded at least once per operating day.
 - h. Construction Permit and FESOP condition 2.3.5.a.i.A states that the minimum scrubber water flow rate based on the hourly average shall be maintained at levels that are consistent with levels at which emission testing demonstrated compliance with applicable requirements.

- i. Construction Permit and FESOP condition 2.3.5.a.i.C states that the maximum scrubber exhaust gas outlet temperature based on the hourly average shall be maintained at levels that are consistent with levels at which emission testing demonstrated compliance with applicable requirements.
 - j. Construction Permit and FESOP condition 2.5.5.c.ii states that during periods when feed is present in the dryers or emissions from other units are vented to the oxidizer/boiler systems, the minimum combustion chamber temperature of each oxidizer/boiler system shall be maintained at a temperature that is consistent with the manufacturer's recommended temperature or at which emission testing demonstrated compliance with applicable requirements.
 - k. Construction Permit and FESOP condition 2.5.6.a.ii states that carbon monoxide (CO) emissions from the affected units controlled by the oxidizer/boiler systems shall be controlled by at least 90 weight percent or to a concentration of no more than 100 parts per million by volume (ppmv), whichever is less stringent.
 - l. Construction Permit and FESOP condition 2.5.6.a.iii states that nitrogen oxides (NO_x) emissions from the affected oxidizer/boiler system shall not exceed 0.05 lb/mmBtu considering total heat input of natural gas to both the feed dryer and oxidizer/boiler system.
 - m. Construction Permit and FESOP condition 3.4 states the recordkeeping and reporting requirements for operating deviations at the facility. Deviations or the lack of deviations shall be reported in quarterly compliance reports submitted to IEPA.
2. The NSPS Subpart Db provisions relevant to this NOV/FOV are as follows:
- a. Since June 2009, the facility has been subject to the requirements of Section 111 of the CAA, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart Db.
 - b. 40 C.F.R. § 60.44b.a.1.i states that no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_x in excess of 0.10 lb/MMBtu.
3. The NSPS Subpart Kb provisions relevant to this NOV/FOV are as follows:
- a. Since June 2009, the facility has been subject to the requirements of Section 111 of the CAA, 42 U.S.C. § 7411, and the implementing regulations at 40 C.F.R. Part 60, Subpart Kb.
 - b. 40 C.F.R. § 60.113b and permit condition 2.7.8 require the facility to conduct inspections of two denatured ethanol storage tanks, a 200 proof ethanol tank, a 190 proof ethanol tank, and a gasoline denaturant tank.

- c. 40 C.F.R. § 60.115b(2) and permit condition 2.7.9 require the facility to keep records of annual inspections of two denatured ethanol storage tanks, a 200 proof ethanol tank, a 190 proof ethanol tank, and a gasoline denaturant tank.

Factual Allegations

4. The factual allegations are as follows:
 - a. On September 21, 2011, EPA sent a CAA Section 114 Information Request to One Earth. On January 20, 2012, One Earth provided documentation in response to the CAA Section 114 Information response.
 - b. For baghouses in use at the facility, the baghouse manufacturer's specifications state that the pressure drop across the filter bags should be 6 inches of water column (in. W.C.) or less.
 - c. In November 2009, a performance test was conducted at the fermentation scrubber. The minimum scrubber water flow rate during the test was 88 gallons per minute. The maximum scrubber gas outlet temperature during the test was 72 °F.
 - d. In November 2009, a performance test was conducted at the two thermal oxidizers. The minimum combustion temperature at thermal oxidizer one (TO1) was 1,540.4 °F. The minimum combustion temperature at thermal oxidizer two (TO2) was 1534.3 °F.
 - e. One Earth's documentation provided in response to the CAA Section 114 Information Request included continuous emission monitoring system (CEMS) data for NOx and CO from the oxidizer/boiler systems.

Explanation of Violations

5. The Permit violations are as follows:
 - a. On multiple occasions from September 2009 to July 2011, baghouse pressure drop readings at the Grain Unloading Baghouse and Hammermill Baghouse exceeded 6 in. W.C., as required by Construction Permit and FESOP condition 2.2.5-2.b.
 - b. On multiple occasions from December 2009 to July 2011, baghouse pressure drop readings at the Cooling Drum Baghouse and DDG Load-Out Baghouse exceeded 6 in. W.C., as required by Construction Permit and FESOP condition 2.6.5-1.a.
 - c. On multiple occasions from September 2009 to September 2011, One Earth failed to record the pressure drop at the Grain Unloading Baghouse and Hammermill Baghouse, as required by Construction Permit and FESOP condition 2.2.9.d.

- d. On multiple occasions from September 2009 to September 2011, One Earth failed to record the pressure drop at the Cooling Drum Baghouse and DDG Load-Out Baghouse, as required by Construction Permit and FESOP condition 2.6.9.b.
 - e. On multiple occasions from December 2009 to June 2011, One Earth failed to maintain the scrubber water flow rate above the limit established during the November 2009 performance test, as required by Construction Permit and FESOP condition 2.3.5.a.i.A.
 - f. On multiple occasions from November 2009 to September 2011, One Earth failed to maintain the scrubber gas outlet temperature below the limit established during the November 2009 performance test, as required by Construction Permit and FESOP condition 2.3.5.a.i.C.
 - g. On multiple occasions from November 2009 to September 2011, One Earth failed to maintain the combustion temperature in either TO1 and/or TO2 above the minimum temperature established during the November 2009 performance test, as required by Construction Permit and FESOP condition 2.5.5.c.ii.
 - h. On multiple occasions from November 2009 to September 2011, One Earth failed to limit the CO emissions at the combined stack for the oxidizer/boiler systems (thermal oxidizers) to less than 200 ppmv (combined stack limit), as required by Construction Permit and FESOP condition 2.5.6.a.ii.
 - i. On multiple occasions from November 2009 to September 2011, One Earth failed to limit NO_x emissions from the combined stack for the thermal oxidizers to less than 0.05 lb/mmBtu, as required by Construction Permit and FESOP condition 2.5.6.a.iii.
 - j. One Earth failed to record and report the multiple operating parameter deviations noted above at the baghouses, fermentation scrubber, and thermal oxidizers, as required by Construction Permit and FESOP condition 3.4.
6. Violations of the NSPS Subpart Db are as follows:
- a. On multiple occasions from December 2010 to September 2011, One Earth failed to limit NO_x emissions from the combined stack for the thermal oxidizers to less than 0.10 lb/mmBtu, as required by 40 C.F.R. § 60.44b.a.1.i.
7. Violations of the NSPS Subpart Kb are as follows:
- a. From July 2009 to June 2011, the facility failed to conduct annual inspections of two denatured ethanol storage tanks, a 200 proof ethanol tank, a 190 proof ethanol tank, and a gasoline denaturant tank as required by 40 C.F.R. § 60.113b and Construction Permit and FESOP condition 2.7.8.
 - b. From July 2009 to June 2011, the facility has failed to keep records of annual inspections of two denatured ethanol storage tanks, a 200 proof ethanol tank, a

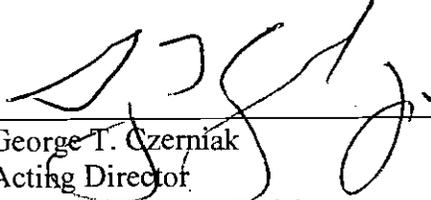
190 proof ethanol tank, and a gasoline denaturant tank as required by by 40 C.F.R. § 60.115b(2) and Construction Permit and FESOP condition 2.7.9.

Environmental Impact of Violations

8. All violations cited above demonstrate elevated emissions of VOCs, particulate matter, NO_x, CO, and hazardous air pollutants, particularly acetaldehyde.
- a. VOCs contribute to ground level ozone, which can irritate the human respiratory system and reduce lung function.
 - b. Particulate matter, especially fine particulates, contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:
 - irritation of the airways, coughing, and difficulty breathing;
 - decreased lung function;
 - aggravated asthma;
 - chronic bronchitis;
 - irregular heartbeat;
 - nonfatal heart attacks; and
 - premature death in people with heart or lung disease.
 - c. Current scientific evidence links short-term NO_x exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. In addition, studies show a connection between breathing elevated short-term NO_x concentrations, and increased hospital admissions for respiratory issues, especially asthma.
 - d. CO can cause harmful health effects by reducing oxygen delivery to the body's tissues, including the heart and brain. At extremely high levels, CO can cause death.
 - e. Acute expose to acetaldehyde results in irritation of the eyes, skin, and respiratory tract, as well as erythema, coughing, pulmonary edema, and necrosis. Chronic exposure to high levels of acetaldehyde has been linked to effects similar to alcoholism, slight anemia, as well as nasal, trachea and kidney pathology. EPA lists acetaldehyde as a probable human carcinogen.

Date

6/22/12


George T. Czerniak
Acting Director
Air and Radiation Division

CERTIFICATE OF MAILING

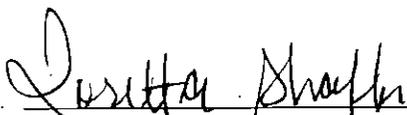
I, Loretta Shafer, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-12-IL-11, by Certified Mail, Return Receipt Requested, to:

Steve Kelly
President
One Earth Energy, LLC
202 North Jordan Drive
Gibson City, IL 60936

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

Ray Pilapil
Manager
Bureau of Air, Compliance and Enforcement Section
Illinois Environmental Protection Agency
P.O. Box 19506
Springfield, Illinois 62794

On the 25 day of June 2012.



Loretta Shafer, Administrative Program Assistant

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7672 9550