



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

MAY 10 2011

REPLY TO THE ATTENTION OF:

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

Chad McNaughton  
Midwest Regional Manager  
Biogas Energy Solutions  
404 North Galena Avenue  
Suite 220  
Dixon, Illinois 61021

Re: Countryside Genco, LLC. - Grayslake, Illinois  
Administrative Order EPA-5-11-113(a)-IL-06

Dear Mr. McNaughton:

Enclosed is an executed original of the Administrative Order regarding the  
above captioned case. If you have any questions about the Order, please contact me at  
312-886-6812.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Brent Marable".

Brent Marable  
Chief

Air Enforcement and Compliance Assurance Section (IL/IN)

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:	)	EPA-5-11-113(a) IL-06
	)	
Countryside Genco, LLC.	)	Proceeding Under Sections 113(a)(1)
Grayslake, Illinois	)	of the Clean Air Act,
	)	42 U.S.C § 7413(a)(1)
_____	)	

Administrative Consent Order

1. The Director of the Air and Radiation Division, United States Environmental Protection Agency (U.S. EPA), Region 5, is issuing this Order to Countryside Genco, LLC (Genco) under Section 113(a)(1) of the Clean Air Act (Act), 42 U.S.C. § 7413(a)(1), and Genco agrees to comply with the Order.

Statutory and Regulatory Background

2. Section 113(a) of the CAA, 42 U.S.C. § 7413(a), 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 an applicable implementation plan or permit. The Administrator has delegated this authority to the Director of the Air and Radiation Division.

3. Section 111 of the CAA, 42 U.S.C. § 7411, requires EPA to implement the New Source Performance Standards (NSPS) program. The NSPS are nationally uniform emission standards for new or modified stationary sources falling within industrial categories that significantly contribute to air pollution.

4. Title V of the CAA, 42 U.S.C. §§ 7661 et seq., established an operating permit program for major sources of air pollution. Section 502(d) of the Act, 42 U.S.C. § 7661a(d), provides that each state must submit to the Administrator of U.S. EPA a permit program meeting

the requirements of Title V.

5. Pursuant to Section 502(b) of the Act, 42 U.S.C. § 7661a(b), the Administrator promulgated regulations, subsequently codified at 40 C.F.R. Part 70, providing for the establishment of Title V permitting programs.

6. 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.

7. Illinois Environmental Protection Agency (IEPA) issued Construction Permit No. 98050077 to Genco. This permit covers the construction and operation of a landfill-gas-to-energy facility.

8. IEPA issued Title V Permit No. 02020063 to Genco on November 25, 2002.

9. Condition 7.1.3(c) of the Genco's Title V Permit provides that the source is subject to the NSPS for Municipal Solid Waste Landfills, 40 C.F.R. Part 60, Subparts A and WWW.

10. NSPS Subpart A, at 40 C.F.R. § 60.11(d), requires that Genco maintain and operate the Facility, as an affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

11. Condition 7.1.6(c)(ii) of the Facility's Title V Permit, and Construction Permit No. 98050077, require that emissions of sulfur dioxide from the six landfill gas fired internal combustion engines not exceed 3.12 pounds per hour or 13.7 tons per year.

#### Findings

12. Genco operates a landfill-gas-to-energy plant on North Route 83 in Grayslake, Illinois (Facility). This Facility is the primary control device for the Countryside Landfill.

13. Countryside Landfill, the source of landfill gas fuel for Countryside Genco,

accepted processed construction and demolition debris from early 2008 through December 2008.

This has caused an elevated level of sulfur compounds in the gas emitted from the landfill, including the gas used by the Facility.

14. When sulfur compounds are combusted in air, sulfur dioxide is produced.

15. By combusting at the Facility landfill gas with elevated levels of sulfur compounds, Genco is in violation of Condition 7.1.3(c) of the Facility's Title V Permit and NSPS Subpart A, at 40 C.F.R. § 60.11(d).

16. Genco was out of compliance with the yearly sulfur dioxide emission limits of Condition 7.1.6(c)(ii) of the Facility's Title V Permit, and Construction Permit No. 98050077, for nine months in 2009, and for seven months in 2010.

17. Genco's violation of its Title V Operating Permit and Construction Permit constitutes violation of section 502 of the CAA and 40 C.F.R. § 70.7(b).

#### Compliance Program

18. Genco shall undertake the following maintenance and monitoring activities:

##### Maintenance

Genco will incorporate the following activities in the facility's maintenance plan, and will continue to perform the following maintenance activities for each engine at these minimal frequencies, subject to any change in operational conditions:

- Perform oil changes on the engines at 350 hours of operation unless sampling and analysis of the engine oil demonstrates that this interval may be extended.
- Check engine spark plugs every 2-3 days using an oscilloscope to identify spark plugs that may need to be changed.
- Check and document engine operating parameters, temperatures, and pressures on a daily basis.

- Perform a minor engine overhaul, or top end cleaning, every 2,000 - 3,000 hours, to remove deposits that build up inside the combustion chamber that builds up on the piston and cylinder head.
- Perform an engine overhaul every 8,000 – 14,000 hours that involves replacing liners, pistons, connecting rods, as well as cylinder heads.
- Perform major engine overhauls approximately every 60,000 operating hours. This service involves swapping the current engine with an engine that was obtained from the OEM manufacturer as a direct replacement, installing a reconditioned turbo on the unit, as well as a fresh generator in order to bring the genset to zero operating hours.
- Perform preventative maintenance on the cooling systems every 2,000 operating hours and during top end cleaning.
- Check the cooling system's isolation valves, belts, lubricate fan motors on a weekly basis.
- Clean cooling system's inlet screens every 2,000 operating hours.
- Swap out and rebuild cooling pumps for each cooling system every 8,000 operating hours.
- Inspect and replace belts on the gas treatment systems every 2,000-3,000 operating hours, or upon an outage that breaks the belts during the shut down.
- Check components of the gas treatment system on a daily basis, including checking the differential pressure across several filters within the system, ensuring knockouts and drains are properly operating, and condensate sumps to verify the pump is operating.
- Perform oil changes on the gas treatment system compressors every 2,500 hours.
- Clean the gas treatment system's gas coolers every 2,000 hours to ensure proper cooling of the gas as it passes through the treatment system.
- Test and calibrate the site protection relays, as well as the individual engine relays, on a yearly basis.

### Monitoring

Genco agrees to add these provisions to the facility's operating permit application within one year:

## LFG Sampling

For each gas sampling and analysis event, three samples of landfill gas will be taken prior to combustion. The samples are to be taken consecutively, and shipped to a laboratory expeditiously. If any problems occur with the sample collection, shipping, or analysis, three new testing runs should be performed as quickly as possible.

## LFG Analysis

The samples will be analyzed using ASTM 5504. The three samples shall be arithmetically averaged together to produce an average total reduced sulfur (TRS) concentration of the landfill gas being combusted. This value will determine the frequency of future monitoring events, as follows:

Less than 750 ppmv TRS - Annual  
750 – 2,000 ppmv - Quarterly  
2,001 – 6,000 ppmv - Monthly  
Above 6,000 ppmv - Weekly

After five consecutive sampling periods with an average TRS concentration lower than the current sampling and analysis regime, sampling and analysis can be reduced to the next lowest frequency interval.

19. Within 30 days of submitting a permit application to IEPA, Genco must provide a copy of the application and to U.S. EPA.

20. While awaiting formal approval of an operating permit for the facility's operations by IEPA, Genco shall follow the terms of the submitted permit application (as set forth above).

21. Genco shall submit reports summarizing all activities undertaken pursuant to this Order six months and twelve months after execution of this Order.

22. Genco must send all reports required by this Order to:

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

### General Provisions

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

24. This Order does not restrict U.S. EPA's authority to enforce the Illinois SIP, applicable permits, or any other section of the Act.

25. Nothing in this Order limits the U.S. EPA's authority to seek appropriate relief, including penalties, under Section 113 of the Act, 42 U.S.C. § 7413, for Genco's violation of the SIP and various permits.

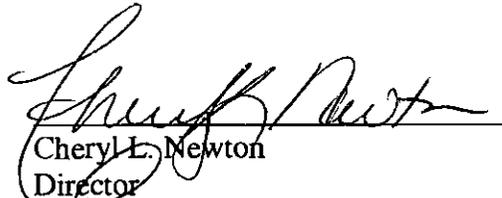
26. Failure to comply with this Order may subject Genco to penalties of up to \$37,500 per day for each violation under Section 113 of the Act, 42 U.S.C. § 7413, and 40 C.F.R. Part 19.

27. The terms of this Order are binding on Genco, its assignees and successors. Genco must give notice of this Order to any successors in interest prior to transferring ownership and must simultaneously verify to U.S. EPA, at the above address, that it has given the notice.

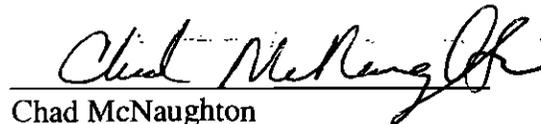
28. U.S. EPA may use any information submitted under this Order in an administrative, civil, judicial, or criminal action.

29. This Order is effective on the date of signature by the Director of the Air and Radiation Division. This Order will terminate one year from the effective date, provided that Genco has complied with all terms of the Order throughout its duration.

5/10/11  
Date

  
Cheryl L. Newton  
Director  
Air and Radiation Division

4-18-11  
Date

  
Chad McNaughton  
Midwest Regional Manager  
Countryside Genco, LLC

**CERTIFICATE OF MAILING**

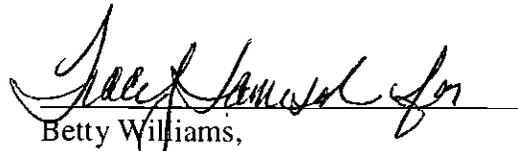
I, Betty Williams, certify that I sent the executed Administrative Order, EPA Order No. EPA-5-11-113(a)-IL-06, by Certified Mail, Return Receipt Requested, to:

Chad McNaughton  
Midwest Regional Manager  
Biogas Energy Solutions  
404 North Galena Avenue  
Suite 220  
Dixon, Illinois 61021

I also certify that I sent a copy of the executed Administrative Order, EPA Order No. EPA-5-11-113(a)-IL-06, by First Class Mail to:

Ray Pilapil, Manager  
Bureau of Air-Compliance and Enforcement Section  
Illinois Environmental Protection Agency  
Springfield, Illinois

on the 10 day of May 2011.

  
Betty Williams,  
Administrative Program Assistant  
Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7600 8725