U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 7 11201 RENNER BOULEVARD LENEXA, KANSAS 66219

IN THE MATTER OF:

Siouxland Energy Cooperative 3890 Garfield Avenue Sioux Center, Iowa ADMINISTRATIVE COMPLIANCE ORDER ON CONSENT Docket No: CAA-07-2018-0022

ADMINISTRATIVE COMPLIANCE ORDER ON CONSENT

- 1. This Administrative Compliance Order on Consent ("Order" or "ACO") is entered into by the United States Environmental Protection Agency ("EPA") and the Siouxland Energy Cooperative ("Siouxland" or "Respondent"). This Order is issued under the authority vested in the Administrator of the EPA by Sections 113(a) and 114(a) of the Clean Air Act ("the Act" or "the CAA"), 42 U.S.C. § 7413(a) and § 7414(a), as amended.
- 2. On the EPA's behalf, Becky Weber, Director of the Air and Waste Management Division, EPA Region 7, is delegated the authority to issue this Order under Section 113(a) of the Act.
- 3. Siouxland Energy Cooperative is a "person" as defined in Section 302(e) of the Act, 42 U.S.C. 7602(e). EPA hereby issues an Order requiring Siouxland to comply with the requirements set forth below. All activities specified below shall be initiated and completed within the maximum time periods for their completion as specified herein. The terms of this ACO shall not be modified except by a subsequent written agreement between the parties.

I. STATUTORY AND REGULATORY FRAMEWORK

- 4. The Clean Air Act establishes a regulatory framework designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. 42 U.S.C. § 7401.7401.
- 5. Section 110 of the Act, 42 U.S.C. § 7410, grants the Administrator of EPA authority to approve a state plan which provides for implementation, maintenance, and enforcement of a standard in each air quality control region within the state.
- 6. Iowa Air Pollution Control Rule 22.3(3), Conditions of Approval, was approved by EPA on September 12, 1985, as part of the Iowa State Implementation Plan. Iowa Rule 22.3(3) states, "[a] permit may be issued subject to conditions which shall be specified in writing. Such conditions may include but are not limited to emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting."
- 7. Section 111 of the CAA, 42 U.S.C. § 7411, authorizes the EPA to develop technology based standards which apply to specific categories of stationary sources. The New Source Performance Standards (NSPS) apply to new, modified and reconstructed affected facilities in specific source categories. The NSPS are developed and implemented by EPA and are delegated to the states. However, even when delegated to the states, EPA retains authority to implement and enforce the NSPS.
- 8. Pursuant to the authority granted under Section 111 of the CAA, 42 U.S.C. § 7411, the EPA promulgated general regulations applicable to all NSPS source categories in 40 C.F.R. Part 60, Subparts A and B. In addition, the EPA promulgated regulations set forth at 40 C.F.R. Part 60, Subpart VV which applies to affected facilities in the synthetic organic

chemicals manufacturing industry that commence construction, reconstruction or modification after January 5, 1981 and on or before November 7, 2006.

- 9. Subparts VV was promulgated due to EPA's determination that emissions from synthetic organic chemicals manufacturing facilities cause, or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.
- 10. "Synthetic organic chemicals manufacturing industry" means the industry that produces, as intermediates or final products, one more of the chemicals listed in 40 C.F.R. § 60.489; 40 C.F.R. § 60.481.
- 11. The group of all equipment (defined in §§ 60.481) within a process unit is an affected facility. 40 C.F.R. §§ 60.480.
- 12. A "process unit" means the components assembled and connected by pipes or ducts to process raw materials and to produce, as intermediate or final products, one or more chemicals listed in § 60.489. 40 C.F.R. §§ 60.481(d).
 - 13. Ethanol is a chemical listed in 40 C.F.R. § 60.489.
- 14. 40 C.F.R. Part 60, Subpart VV requires the use of Method 21 for Determination of Organic Compound Leaks or alternative work practice for monitoring leaks from equipment in organic chemical operation. 40 C.F.R. § 60.485; 40 C.F.R. § 60.18(g).
- 15. 40 C.F.R. §§ 60.482-10(g) requires that if use of Method 21 detects a leak, as indicated by an instrument reading greater than 500 part per million by volume or by visual inspections, the leak shall be repaired as soon as practicable except as provided in paragraph (h) of 40 C.F.R § 60.482-10. The first attempt at repair shall be made no later than 5 calendar days after the leak is detected. 40 C.F.R. §§ 60.482-10(g)(1). Repair shall be completed no later than 15 calendar days after the leak is detected. 40 C.F.R. §§ 60.482-10(g)(2).

- 16. EPA promulgated regulations set forth at 40 C.F.R. Part 60, Subpart Kb which applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids (VOL) for which construction, reconstruction or modification is commenced after July 23, 1984.
- 17. 40 C.F.R. § 60.115b(a)(2) requires the owner or operator to keep records of each inspection performed as required by 40 C.F.R. §§ 60.113b(a)(1), (a)(2), and (a)(3), and (a)(4).
- 18. Iowa Permit 07-A-465 issued to Siouxland Energy on April 13, 2007, describes the requirements for the Product Loadout EUS50. The permit requires the owner or operator to follow the applicable standards of Subpart VV, 40 C.F.R. §§ 60.480 through 60.489.
- 19. Iowa Permit 07-A-464 issued to Siouxland Energy on April 13, 2007, describes the permit requirements for Emission Point EP-S41which is for the following emission units Fermenters #1 through #4 and Beerwell, EU P41a EU P41e. The permit requires the CO₂ Scrubber (C41) to maintain a minimum pressure drop which is calculated at 90 percent of the average pressure drop across the wet scrubber measured during the most recent performance test demonstrating compliance with the particulate matter emission limit. Permit Condition 14.
- 20. Iowa Permit 07-A-479 issued to Siouxland Energy on April 13, 2007, describes the permit requirements for Dust Emissions from Internal Plant Roads (paved) (i.e. Truck Traffic) F100. The permit requires that truck traffic emissions on paved roads shall be controlled by water flushing and sweeping once per day. Permit Condition 14 D. Permit Condition 17.
- 21. Iowa Permit 07-A-479 requires the facility to keep records of the water flushing and sweeping. Permit Condition 15.

II. FACTUAL BACKGROUND

- 22. At all times pertinent to this action, Siouxland Energy Cooperative was the "owner" or "operator" of the Siouxland Energy Cooperative Facility ("Facility"), a synthetic organic chemical manufacturer, located at 3890 Garfield, Sioux Center, Iowa, within the meaning of Section 111(a)(5) of the Act, 42 U.S.C. § 7411(a)(5).
- 23. At all times pertinent to this action, the Facility was a "stationary source" as that term is defined in Section 111(a)(3) of the Act, 42 U.S.C. § 7411(a)(3).
- 24. At all times pertinent to this action, the Facility produced as an intermediate or final product, ethanol, a chemical listed in 40 C.F.R. § 60.489, thus making it a "synthetic organic chemical manufacturer."
- 25. At all times pertinent to this action, the Respondent was subject to 40 C.F.R. Part 60, Subpart VV because it owns or operates a synthetic organic chemical manufacturing facility that commenced construction, reconstruction, or modification after January 5, 1981 and on or before November 7, 2006.
- 26. Pursuant to Chapter 22 of the Iowa State Implementation Plan, the Iowa Department of Natural Resources ("IDNR") issued construction permits to Siouxland Energy that impose emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting at the Facility.
- 27. The Facility is a synthetic minor source as noted in the various construction permits issued by IDNR under which the facility operates. *See* Permits: 01-A-015-S3, 07-A-464, 07-A-465, 07-A-79.
- 28. EPA conducted an inspection of the Siouxland Energy Cooperative on March 8,2017. The inspector issued a Notice of Potential Finding outlining the following issues: (1) the

EPA inspector noted that the pressure drop for the CO₂ Scrubber was not being maintained above the 90% threshold as outlined in their construction permit; (2) the inspector noted that VOC emissions were observed following alternative work practices under 40 C.F.R. 60.18(g) with a FLIR GF320 VOC gas imaging camera which indicated liquid ethanol and VOC leaks at the North and South Product Loadout Bays; (3) the EPA inspector also recorded that the monitoring inlet of the monitoring device (a flame ionization detector ("FID"), model TVA-1000B) used by Siouxland was completely clogged and the monitors filter was caked with dirt; (4) the inspector noted that the calibration gas used to calibrate the FID at the facility was expired; and (5) the inspector noted that the records required by 40 C.F.R. Part 60 Subpart Kb for annual inspections were not onsite and records for paved road dust suppression were not maintain as required per construction permit 07-A-479.

III. FINDINGS

- 29. EPA finds that Siouxland Energy Cooperative has not maintained a minimum pressure drop of at least 90% of the most recent performance test as required by Permit 07-A-464, Condition 14.
- 30. EPA finds that Siouxland Energy Cooperative has not properly addressed VOC and emissions at the North and South Product Loadout Bays using good engineering control practices and requirements of 40 C.F.R. Part 60 Subparts VV §§ 60.480 for leak detection and repair as required by Permit 07-A-465, Condition 14.
- 31. EPA finds that Siouxland Energy Cooperative has failed to properly monitor leak detection and repair equipment in accordance with EPA Method 21 as required by 40 C.F.R. 60.18(g), 40 C.F.R. §§ 60.485. Specifically, EPA finds that Siouxland conducted improper

monitoring under Method 21 by monitoring with expired calibration gas and having a clogged sampling port and filter on monitoring instrument.

- 32. EPA finds that Siouxland Energy Cooperative has failed to properly maintain inspection records in accordance with 40 C.F.R. § 60.115b for the years 2015 and 2016.
- 33. EPA finds that Siouxland Energy Cooperative has failed to properly record and maintain records as required by IDNR construction permit 07-A-479 Conditions 14 and 15 for Dust Suppression.

IV. ORDER

Respondent is ordered to conduct the compliance program described in this Order:

- 34. Standard Operating Procedures to Improve Monitoring Activities:
 - a. As of the effective date of this Order, Siouxland Energy Cooperative shall devise and submit a work plan outlining the Standard Operating
 Procedures ("SOP") for the following areas:
 - i. Pressure Drop for CO₂ Scrubber: SOP shall outline steps to ensure that pressure drop is constantly monitored as required by permit 07-A-464 to maintain a minimum pressure drop of at least 90% of the most recent performance test demonstrating compliance with the particulate matter emission limitation.
 - ii. Product Loadout Bay operations: SOP shall outline procedures to ensure that vapor recovery lines are functioning consistently with good engineering control practices and requirements of 40 C.F.R. Part 60 Subpart VV (i.e, replacement intervals for hose assembly, couplers and gaskets, inspection methods and corrective actions).

- iii. Road Dust emission controls: Develop a log for identifying and recording when water flushing and sweeping is performed.
- 25. Documentation of Findings Correction and Continued Compliance. Siouxland Energy Cooperative shall provide a copy of the SOPs that incorporate the requirements of Paragraph 34 within 120 days following the effective date of this Order to demonstrate correction of the above findings and continued compliance with the monitoring requirements of construction permits 01-A-015-S3, 07-A-464, 07-A-465, 07-A-79, 40 C.F.R. §§ 60.480-489, and § 60.115b. The submittal shall be sent to EPA in accordance with Section V. (Submittals) of this Order.
- 36. Review and Approval Procedures: EPA will review any document that is specifically required to be submitted by Respondent according to the procedures outlined in this paragraph. EPA will review such document and may approve, approve with comments, or disapprove and provide comments. If the document is approved with comments, Respondent may proceed with any actions required by the document but must incorporate EPA's comments and resubmit the document within twenty (20) days of receipt of comments. If the document is disapproved, Respondent shall incorporate any comments within twenty (20) days of Respondent's receipt of such comments and resubmit the document. The EPA shall review the revised document and shall approve, approve with comments, or disapprove the document.

V. SUBMITTALS

37. After Respondent has implemented the Standard Operating Procedures as described in the Work Plan in accordance with paragraph 34, Respondent shall submit a Certified Completion report. The Certified Completion report shall be submitted to the EPA within 30 days of the completion of the requirements of paragraph 34, above.

38. All documents required to be submitted to EPA by this Order shall contain the following certification, signed by an officer of Siouxland Energy Cooperative:

I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. I certify that I am authorized to enter into the terms and conditions of this Order to execute and bind legally the Respondent to this document.

The submissions required by the above paragraphs and subparagraphs shall be made in electronic format to:

Joe Terriquez
Air Permitting & Compliance Branch
U.S. EPA Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219
Email: Terriquez.Joe@epa.gov

39. To the extent this Order requires Respondent to submit any information to the EPA, Respondent may assert a business confidentiality claim covering part or all of that information, but only to the extent and only in the manner described in 40 C.F.R. Part 2, Subpart B. The EPA will disclose information submitted under a confidentiality claim only as provided in 40 C.F.R. Part 2, Subpart B. If Respondent does not assert a confidentiality claim, the EPA may make the submitted information available to the public without further notice to Respondent.

VI. OTHER TERMS AND CONDITIONS

- 40. Respondent admits the jurisdictional allegations contained in this Order.
- 41. Respondent neither admits nor denies the findings in Section III (Findings) of this Order.

VII. GENERAL PROVISIONS

- 42. Any violation of this Order may result in a civil administrative or judicial action for an injunction or civil penalties of up to \$45,268 per day per violation, or both, as provided in Sections 113(b)(2) and 113(d)(1) of the Act, 42 U.S.C. § 7413(b)(2) and § 7413(d)(1), as well as criminal sanctions as provided in Section 113(c) of the Act, 42 U.S.C. § 7413(c). The EPA may use any information submitted under this Order in an administrative, civil judicial, or criminal action.
- 43. Nothing in this Order shall relieve Respondent of the duty to comply with all applicable provisions of the Act or other federal, state, or local laws or statutes, nor shall it restrict the EPA's authority to seek compliance with any applicable laws or regulations, nor shall it be construed to be a ruling on, or determination of, any issue related to any federal, state, or local permit.
- 44. Nothing herein shall be construed to limit the power and authority of EPA to undertake any action against Respondent or any person in response to conditions that may present an imminent and substantial endangerment to the public health, welfare, or the environment.
- 45. The provisions of this Order shall apply to and be binding upon Respondent and its officers, directors, employees, agents, trustees, servants, authorized representatives, successors, and assigns. From the Effective Date of this Order until the Termination Date as set forth in paragraph 50 below, Respondent must give written notice and a copy of this Order to any successors in interest prior to any transfer of ownership or control of any portion of or interest in Siouxland Energy. Simultaneously with such notice, Respondent shall provide written notice of such transfer, assignment, or delegation to the EPA. In the event of any such transfer,

assignment, or delegation, Respondent shall not be released from the obligations or liabilities of this Order unless the EPA has provided written approval of the release of said obligations or liabilities.

46. Unless this Order states otherwise, whenever under the terms of this Order, written notice or other document is required to be given, it shall be directed to the individuals specified at the address below unless those individuals or their successors give notice of a change of address to the other party in writing:

Joe Terriquez
Air Permitting & Compliance Branch
U.S. EPA Region 7
11201 Renner Boulevard
Lenexa, Kansas 66219
Email: Terriquez.Joe@epa.gov

47. Each undersigned representative of the Parties certifies that he or she is authorized to enter into the terms and conditions of this Order to execute and bind legally the parties to this document.

VIII. EFFECTIVE DATE: OPPORTUNITY FOR A CONFERENCE

- 48. Pursuant to Section 113(a)(4) of the Act, an Order does not take effect until the person to whom it has been issued has had an opportunity to confer with the EPA concerning the alleged violations. By signing this Order, Respondent acknowledges and agrees that it has been provided an opportunity to confer with the EPA prior to issuance of this Order. Accordingly, this Order will take effect immediately upon signature by the latter of Respondent or the EPA.
 - 49. Any inquiries regarding this Order shall be addressed to:

Jonathan Meyer
Assistant Regional Counsel
U.S. Environmental Protection Agency, Region 7
11201 Renner Boulevard

Lenexa, Kansas 66219 Phone: (913) 551-7140

Fax: (913) 551-7925

IX. <u>TERMINATION</u>

- 50. This Order shall terminate on the earlier of the following (the "Termination Date") at which point Respondent shall operate in compliance with the Act:
 - a. One year after the Effective Date of this Order;
 - b. The effective date of any determination by the EPA that Respondent has achieved compliance with all terms of this Order; or
 - c. Immediately upon receipt by Respondent of notice from the EPA finding that an imminent and substantial endangerment to public health, welfare, or the environment has occurred.

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

5)8)18

Becky Webe

Director, Air and Waste Management Division U.S. Environmental Protection Agency Region 7

FOR THE RESPONDENT:

Siouxland Energy Cooperative Sioux Center, Iowa

Date

Signature

Signature

Printed Name

Op Dirosan

Title

3890 Gu-RipH Aup Siacak Confor J. 5/250

Address

CERTIFICATE OF SERVICE

I certify that copies of the foregoing "Administrative Compliance Order on Consent" in the Matter of Siouxland Energy Cooperative, Order CAA-07-2018-0022, were mailed to the parties as indicated below.

Via Certified Mail, Return Receipt Requested:

Siouxland Energy Cooperative 3890 Garfield Sioux Center, Iowa 51250

Via First Class Mail:

Brian Hutchins
Supervisor, Air Quality Compliance and Monitoring
Iowa Department of Natural Resources
Wallace State Office Building
502 E. 9th St.
Des Moines, IA 50319

5/14/8 Date

Signature
Office of Resignal Convex /SEE

Title