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DEPT. OF WATER, ENERGY, AND ENVIRONMENT

Jim Pillen, Governor

AIR QUALITY CONSTRUCTION PERMIT
NEW SOURCE REVIEW (NSR) CLASSIFICATION: MINOR

PERMIT NUMBER: CP26-001

NDWEE ID: 124544
Program ID: AIR 001-00149

Permit Issued To: Juniata Energy Partners, LLC
Name of Source in Application: JEP Digester

Mailing Address: 1310 Wynkoop St., Ste 400, Denver, Colorado, 80202
Source Location: 0.25 miles west of the intersection of W 42nd and N Alda, Juniata, Adams, Nebraska

Project Description: **MINOR NSR SOURCE** – NEW CONSTRUCTION

NEW CONSTRUCTION of an anaerobic digestion and biogas processing facility with thirty-four (34) digester tanks capable of producing 3,975 MMscf of biogas per year.

Standard Industrial Classification (SIC) Code: 492500, Gas production and/or distribution

North American Industry Classification System (NAICS) Code: 221210, Natural Gas Distribution

Pursuant to Chapter 10 of the Nebraska Air Quality Regulations, the public has been notified by prominent advertisement of this proposed construction of an air contaminant source and the thirty (30) day period allowed for comments has elapsed. This construction permit approves the proposed project as identified in air quality construction permit application #26-001 received January 7, 2026, and any subsequent supplementary facts or corrected information, which the NDWEE considered applicable and incorporated into the permitting documents. Additional details of the proposed revisions, including estimated pollutant emission changes, can be found in the accompanying Fact Sheet.

Compliance with this permit shall not be a defense to any enforcement action for violation of an ambient air quality standard. The permit holder, owner, and operator of the facility shall assure that the installation, operation, and maintenance of all equipment is in compliance with all of the conditions of this permit.

The undersigned issues this permit on behalf of the Director under the authority of Title 129 – Nebraska Air Quality Regulations as amended September 28, 2022.

D R A F T

_____
Date

_____
Reuel S. Anderson, Administrator
Permitting and Engineering Division

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ABBREVIATIONS, SYMBOLS, and UNITS OF MEASURE

ABS	Ammonium Bisulfate
AP-42	Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources
ATS	Ammonium Thiosulfate
BACT	Best Available Control Technology
bhp	Brake Horsepower
BMP	Best Management Practice
Btu	British Thermal Unit
bu	Bushel
CAA	Clean Air Act
CE	Control Equipment
CEM	Continuous Emissions Monitor
CEMS	Continuous Emissions Monitoring System
cf	Cubic feet
CFR	Code of Federal Regulations
CI	Compression Ignition
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	CO_2 equivalent
COMS	Continuous Opacity Monitoring System
CP	Construction Permit
DDGS	Dry Distillers Grains with Solubles
DGS	Distiller's Grains with Solubles
dscf	Dry Standard Cubic Feet
dscfm	Dry Standard Cubic Feet per Minute
EMIS	Emergency Management Information System
EP	Emission Point
EPA	Environmental Protection Agency
EQC	Environmental Quality Council
ESP	Electrostatic Precipitator
EU	Emission Unit
FDCP	Fugitive Dust Control Plan
FGR	Flue Gas Recirculation
FID	Facility Identification Number
FIP	Federal Implementation Plan
FR	Federal Register
ft	Feet
FTIR	Fourier Transform Infrared
GHGs	Greenhouse Gases
H_2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutant
hp	Horsepower
hr	Hour
kWh	Kilowatt hours
lb	Pound
LDAR	Leak Detection and Repair
LNB	Low-NO_x Burner
MACT	Maximum Achievable Control Technology
Mgal	One Thousand gallons
MMBtu	One Million British Thermal Units
MMscf	One Million Standard Cubic Feet
MSDS	Material Safety Data Sheet
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NDWEE	Nebraska Department of Water, Energy, and Environment
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
PAL	Plant-wide Applicability Limit
Pb	Lead (chemical abbreviation)
PbR	Permit-by-Rule
PEMS	Predictive Emissions Monitoring System
PM	Particulate Matter
PM_{10}	Particulate Matter with an aerodynamic diameter equal to or less than 10 microns
$PM_{2.5}$	Particulate Matter with an aerodynamic diameter equal to or less than 2.5 microns
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million by volume
ppmvd	Parts per Million by volume, dry basis
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RATA	Relative Accuracy Test Audit
RICE	Reciprocating Internal Combustion Engine
RMP	Risk Management Plan
RNG	Renewable Natural Gas
RTO	Regenerative Thermal Oxidizer
RVP	Reid Vapor Pressure
scf	Standard Cubic Feet
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SO_x	Sulfur Oxides
TDS	Total Dissolved Solids
TEG	Triethylene Glycol
TO	Thermal Oxidizer
TO/HRSG	Thermal Oxidizer with Heat Recovery Steam Generator
tpy	Tons per year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate Matter
ULNB	Ultra Low-NO_x Burner
UST	Underground Storage Tank
UTM	Universal Transverse Mercator
VHAP	Volatile Hazardous Air Pollutant
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WDGS	Wet Distiller's Grains with Soluble

I. STANDARD CONDITIONS

The following Standard Conditions apply to this permit unless otherwise provided for in the Specific Conditions of this permit.

(A) Regulatory authority:

(1) Title 40 Protection of Environment, Code of Federal Regulations that apply to the source including those not currently delegated to Nebraska or not yet included in Title 129; and

(2) Title 129 as approved by EPA under 40 CFR Part 52, Subpart CC or 40 CFR Part 70, Appendix A as of the date of issuance of this permit (federally enforceable requirements); and Title 129 as amended September 28, 2022 (state only enforceable requirements).

(B) The source shall allow the NDWEE, USEPA or an authorized representative, upon presentation of credentials (Neb. Rev. Statute §81-1504; Title 129, Chapter 6, Section 003.11) to:

(1) Enter upon the source's premises during reasonable hours where a source subject to this permit is located, emissions-related activity is conducted, or where records must be kept under the conditions of this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(2) Have access to and copy, during reasonable hours, any records that must be kept under the conditions of this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(3) Inspect during reasonable hours any facilities, pollution control equipment, including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit, for the purpose of ensuring compliance with this permit or applicable requirements;

(4) Sample or monitor, during reasonable hours, substances or parameters for the purpose of ensuring compliance with the permit or applicable requirements.

(C) All requested permit amendments and revisions must adhere to the requirements of Title 129, Chapter 9.

(D) The following methods may be used to determine compliance with the terms and conditions in this permit (Title 129, Chapter 15, Section 005.08):

(1) Any compliance test method specified in the State Implementation Plan;

(2) Any test or monitoring method approved for the source in a permit issued pursuant to Title 129, Chapters 3, 4, or 13, Section 004;

(3) Any test or monitoring method provided for in Title 129; or

(4) Any other test, monitoring, or information-gathering method that produces information comparable to that produced by any method described in Condition I.(D)(1) through (3).

(E) Application for review of plans or advice furnished by the Director will not relieve the source of legal compliance with any provision of these regulations, or prevent the Director from enforcing or implementing any provision of these regulations (Title 129, Chapter 1, Section 001.06).

(F) If and when the Director declares an air pollution episode as defined in Title 129, Chapter 2, Section 006.01, the source shall immediately take all required actions listed in Title 129, Appendix II, Paragraph 1.1, 1.2, and 1.3, respectively, until the Director declares the air pollution episode terminated (Title 129, Chapter 2, Section 006.03).

(G) Recordkeeping: To ensure compliance with this permit, records shall be maintained as outlined below. Records include: electronic and/or paper copies of all application materials, notifications, reports, test protocols, test results, and plans; and, electronic and/or original paper copies of all required monitoring results, measurements, inspections, and observations (Title 129, Chapter 15, Section 005.06; Neb. Rev. Stat. §81-1504):

(1) All records required by this permit shall be kept for a minimum of five (5) years and shall be clear and readily accessible to NDWEE representatives during an inspection, unless otherwise specified in this permit.

(2) Monthly calculations and records required throughout this permit shall be compiled no later than the fifteenth (15^{th}) day of each calendar month and shall include all records and calculations generated through the previous calendar month, unless otherwise specified in this permit (Title 129, Chapter 6, Section 003.03).

(3) The source shall keep the following records for each malfunction, start-up and shutdown where emissions were, or may have been, in excess of an emission limitation or standard (Title 129, Chapter 11, Sections 002 and 005; Chapter 15, Sections 006.02, 006.04 and 006.05):

(a) The identity of the equipment.

(b) Reason for, or cause of, the malfunction, shutdown, or start-up.

(c) Duration of period of excess emissions.

(d) Date and time of the malfunction, shutdown, or start-up.

(e) Physical and chemical composition of pollutants whose emissions are affected by the action.

(f) Methods, operating data, and/or calculations used to determine these emissions.

(g) Quantification of emissions in the units of the applicable emission control regulation.

(h) All measures utilized to minimize the extent and duration of excess emissions during the malfunction, shutdown, and start-up.

(4) The source shall keep records of maintenance performed on components of permitted emission units that would affect or potentially affect the emission rate of that unit and on control and monitoring equipment associated with the permitted emission unit (Title 129, Chapter 15, Sections 005.06, 006.06B, and 006.06E).

(5) All records of opacity readings, instrument readings, visual equipment inspections, logbook/sheet entries, and any other record of equipment performance shall identify the individual who entered the record, except for continuously generated electronic records.

(6) Operation and maintenance manuals, or equivalent documentation, detailing proper operation and maintenance of all permitted emission units, required control equipment, and required monitoring equipment shall be kept for the life of the equipment.

(H) All permitted emission units, associated emissions conveyances, required control equipment, and required monitoring equipment shall be properly installed, operated, and maintained (Title 129, Chapter 6, Sections 003.01 and 003.13; Chapter 15, Section 005.06; Neb. Rev. Stat. §81-1504 and §81-1506).

(1) All emissions from emission units using required controls shall be captured and routed through associated emission conveyances to the required control equipment, except for

uncaptured emissions described in the permit application and any additional information submitted prior to permit issuance.

(2) All equipment must be maintained to minimize the amount of uncontrolled pollutants that are released to the atmosphere. Proper equipment maintenance activities may include repair or replacement, and include, but are not limited to activities in response to the following:

(a) cracks, holes or gaps,

(b) broken, cracked, or otherwise damaged seals or gaskets, and

(c) broken, missing or open hatches, access covers, caps, or other closure devices.

(I) When the source makes physical or operational changes to an emissions unit or associated control equipment that may cause an increase in emissions that makes the original testing not representative of current operating conditions or emissions, the source shall submit a notification of the change. Such notification shall be received by NDWEE within fifteen (15) days after such change. The NDWEE may require performance testing based on review of the specific changes identified in the notification and the resulting potential impact on emissions from the unit(s) and/or performance of the control equipment (Title 129, Chapter 15, Section 005.01).

(1) This notification requirement applies to emissions units and/or control equipment that meet the following requirements, except as provided in Condition I.(I)(5):

(a) Emissions from the emissions unit and/or control equipment is subject to an emissions limit;

(b) A valid performance test has been conducted for the pollutant to which the emissions limit applies;

(c) Changes that may cause emissions to increase or invalidate prior testing include, but are not limited to, increasing the capacity of an emissions unit, changing the operational parameters of any control equipment outside of the range allowed for under this permit that makes the control equipment less efficient, changing the type of scrubber packing, or increasing the inlet pollutant loading of any control equipment.

(2) For emission units that have had a performance test conducted after January 1, 2012, the source shall make a one-time notification to the NDWEE within fifteen (15) days of when there is a 10% increase in daily production/throughput rate, over the tested rate recorded during the most recent valid performance test unless otherwise specified in this permit. If there are subsequent 10% increases over the rate most recently notified to the NDWEE, the source shall make a one-time notification to the NDWEE of each such subsequent increase. This will not apply to emissions that already have emission rates that are normalized to production and/or throughput rates.

(3) The notification shall include the date of the changes, a description of the changes made, and an evaluation of the expected impact on emissions from the emissions units and/or control equipment.

(4) The following definitions apply for purposes of Condition I.(I)(2) above:

(a) “rate” shall mean the production or throughput of an emissions unit in the same units of production or throughput as the “tested rate” as defined below; and,

(b) “tested rate” shall mean the production or throughput rate of an emissions unit as recorded in the most recent valid performance test and reported to the NDWEE in the source’s written copy of the test results, or test report,

documenting the maximum capacity of the unit(s). The tested rate shall be extrapolated to daily. Examples include, but are not limited to, tons per hour to tons per day or gallons per hour to gallons per day.

(5) The above notification requirements do not apply when compliance with the emission limitation is demonstrated through the use of a CEMS, PEMS or COMS.

(J) No person shall cause or allow emissions, from any source, which are of an opacity equal to or greater than twenty percent (20%), as evaluated by an EPA approved method, or recorded by a continuous opacity monitoring system operated and maintained pursuant to 40 CFR Part 60 Appendix B except as provided for in Chapter 15, Sections 001.05 or 001.06 (Title 129, Chapter 15, Section 001.04).

(K) Open fires are prohibited except as allowed by Title 129, Chapter 15, Section 002.

(L) Particulate Matter – General Requirements (Title 129, Chapter 15, Section 003):

(1) The source shall not cause or permit the handling, transporting or storage of any material in a manner which allows particulate matter to become airborne in such quantities and concentrations that it remains visible in the ambient air beyond the property line.

(2) The source shall not cause or permit the construction, use, repair or demolition of a building, its appurtenances, a road, a driveway, or an open area without applying all reasonable measures to prevent particulate matter from becoming airborne and remaining visible beyond the property line. Such measures include, but are not limited to, paving or frequent cleaning of roads, driveways and parking lots; application of dust-free surfaces; application of water; and planting and maintenance of vegetative ground cover.

(M) Testing:

(1) Performance testing if required by this permit or required by the NDWEE shall be completed as follows:

(a) The source shall provide the NDWEE a written notice at least thirty (30) days prior to testing to afford the NDWEE an opportunity to have an observer present. The NDWEE may, in writing, approve a notice of less than 30 days. If the testing is pursuant to an underlying requirement contained in a federal rule, the notice provisions of the underlying requirement apply (Title 129, Chapter 15, Section 005.03).

(b) The notification required by Condition I.(M)(1)(a) shall include the following (Title 129, Chapter 15, Section 005.03):

(i) Facility Name, Address and FID number.

(ii) Company Name, Address and Contact Person's name.

(iii) Test schedule including date and estimated start time of testing.

(iv) List all applicable regulatory requirements that testing is being conducted for (permit condition, MACT, NSPS, etc.).

(v) Types of pollutants to be sampled including applicable emission limits and demonstration requirements.

(vi) Test methods and documentation of any proposed variations from the specified procedures and reason for variance.

(c) Testing shall be conducted according to the methodologies found in Title 129, Chapter 15, Section 005.02, or other NDWEE approved methodologies (Title 129, Chapter 15, Section 005.02).

(d) Performance tests shall be performed under those representative (normal) conditions that: represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition. (Title 129, Chapter 15, Section 005).

(e) Performance tests shall be conducted for a minimum of three (3) one-hour runs unless another run-time is specified by the applicable Subpart or as deemed appropriate by the NDWEE.

(f) The source shall monitor and record the operating parameters for process and control equipment during the performance testing required in the permit.

(g) A certified written copy of the test results, signed by the person conducting the test, shall be provided to the NDWEE within sixty (60) days of completion of the test, unless a different time period is specified in the underlying requirements of an applicable federal rule, and will, at a minimum, contain the following items (Title 129, Chapter 15, Section 005.02G):

(i) A description of:

1. The operating parameters for the emissions unit during testing. Examples include, but are not limited to, production rates, process throughputs, firing rates of combustion equipment, or fuel usage; and,

2. The operating parameters for the control equipment during testing. Examples include, but are not limited to, baghouse fan speeds, scrubber liquid flow rates, or pressure drop across the control device.

(ii) Copies of all data sheets from the test run(s).

(iii) A description and explanation of any erroneous data or unusual circumstance(s) and the cause for such situation.

(iv) A final conclusion section describing the outcome of the testing.

II. GENERAL CONSTRUCTION PERMIT CONDITIONS

The following General Conditions apply to this permit unless otherwise provided for in the Specific Conditions of this permit.

(A) The source shall provide the following notifications to the NDWEE:

(1) The date construction, reconstruction, or modification commenced as defined in Chapter 1. Notification shall be received by NDWEE no later than thirty (30) days after such date and include a summary description of the event associated with the commencement of construction. The source may use either of the following to determine that construction commenced (Title 129, Chapter 3, Section 003.02):

(a) Initiating physical on-site construction activities of a permanent nature that meet the definition of "begin actual construction" or

(b) Entering into binding agreements or contractual obligations. If this option is used, the notice shall also include a brief summary of each binding agreement or contractual obligation entered into, the date of the agreement or contract, and why the agreement or contract cannot be cancelled or modified without substantial loss to the source.

(2) Notification of the date on which the source or modification first becomes operational, shall be received by the NDWEE within fifteen (15) days after such date (Title 129, Chapter 6, Section 002.01A).

(3) Any emissions due to malfunctions, unplanned shutdowns, and ensuing start-ups that are, or may be, in excess of applicable emission limits shall be reported to the NDWEE in accordance with Title 129, Chapter 15, Section 006.05.

(B) Approval to construct, reconstruct, and/or modify the source will become invalid if a continuous program of construction is not commenced within 18 months after the date of issuance of the construction permit except upon a showing by the source that the complexity of the construction, reconstruction and/or modification requires additional time, or if construction, reconstruction or modification is discontinued for a period of 18 months or more, or if construction, reconstruction and/or modification is not completed within a reasonable period of time (Title 129, Chapter 3, Section 003.02).

(C) This permit is not transferable to another location, unless otherwise specified in this permit (Title 129, Chapter 3).

(D) Holding of this permit does not relieve the source from the responsibility to comply with all applicable portions of the Nebraska Air Quality Regulations and any other requirements under local, State, or Federal law. Any permit noncompliance shall constitute a violation of the Nebraska Environmental Protection Act and the Federal Clean Air Act, and is grounds for enforcement action or permit revocation (Title 129, Chapter 3, Section 001).

(E) Any source who failed to submit any relevant facts or who submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. If the permittee wishes to make changes at the source that will result in change(s) to values, specifications, and/or locations of emission points that were indicated in the permit application (or other supplemental information provided by the permittee and reviewed by the NDWEE in issuance of this permit), the source must notify the NDWEE before the change(s) can be made. In addition, the source must notify the NDWEE if any modification which may result in an adverse change to the air

quality impacts predicted by atmospheric dispersion modeling (such as changes in stack parameters or increases in emission rates, potential emissions, or actual emissions). The permittee shall provide all necessary information to verify that there are no substantive changes affecting the basis upon which this permit was issued. Information may include, but not be limited to, additional engineering, modeling, and ambient air quality studies (Title 129, Chapter 3, Sections 002.02B, 002.03B, and 002.03C).

(F) When requested by the NDWEE, the permittee shall submit completed emission inventory forms for the preceding year to the NDWEE by March 31 of each year (Title 129, Chapter 11).

(G) If required, performance tests shall be conducted in accordance with Standard Condition I.(M) within sixty (60) days after first reaching the maximum capacity, but not more than 180 days after the start-up of operations of each unit, unless otherwise specified by the NDWEE (Title 129, Chapter 15, Section 005.07).

(H) If applicable, the following conditions apply to the verification of NAAQS modeling analysis (Title 129, Chapter 2):

(1) The stack dimensions of the emission points identified in the air dispersion modeling analysis shall be constructed such that the reliability of the air dispersion modeling analysis associated with the permit application is maintained. A site survey or similar documentation containing the as-built stack dimensions, shall be maintained on-site and kept for the life of the source. If the as-built stack dimensions do not meet the criteria used in air dispersion modeling analysis, the permittee shall notify the NDWEE prior to start-up of any emission unit associated with a stack not meeting the above criteria and, if requested by NDWEE, submit a revised air dispersion modeling analysis to NDWEE to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Title 129 Chapter 2.

(2) The source shall sufficiently restrict public access to the source at the ambient air boundary relied upon in the air dispersion modeling analysis for the NAAQS compliance demonstration. A site survey, or similar documentation containing the locations of the boundary vertices, shall be maintained on-site and kept for the life of the source. If the boundary dimensions do not comply with the boundary information in the air dispersion model (plus or minus 25 meters), the permittee shall notify the NDWEE prior to start-up of any emission unit and, if requested, submit a revised air dispersion modeling analysis to the NDWEE to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Title 129 Chapter 2.

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION UNITS

(A) Specific Conditions for RNG Production

(1) Permitted Equipment: The source is permitted to construct the emission points and associated emission units identified in the following table and controlled by the required control equipment as indicated:

Emission Point ID#	Required Control Unit ID# and Description	Equipment Description
EP-2.1: RNG TEG Reboiler AND EP-7.1a: Startup Flare AND EP-7.2a: Startup Flare AND EP-7.3a: Startup Flare	CE-3: Amine System[1][2]	EU-1.01: Hydrolysis Tank EU-1.02: Hydrolysis Tank EU-1.03: Hydrolysis Tank EU-1.04: Hydrolysis Tank EU-1.05: Hydrolysis Tank EU-1.06: Hydrolysis Tank EU-1.07: Hydrolysis Tank EU-1.08: Hydrolysis Tank EU-1.09: Hydrolysis Tank EU-1.10: Hydrolysis Tank EU-1.11: Hydrolysis Tank EU-1.12: Hydrolysis Tank EU-2.01: Main Fermenter EU-2.02: Main Fermenter EU-2.03: Main Fermenter EU-2.04: Main Fermenter EU-2.05: Main Fermenter EU-2.06: Main Fermenter EU-2.07: Main Fermenter EU-2.08: Main Fermenter EU-3.01: Post Fermenter EU-3.02: Post Fermenter EU-3.03: Post Fermenter EU-3.04: Post Fermenter EU-3.05: Post Fermenter EU-3.06: Post Fermenter EU-3.07: Post Fermenter EU-3.08: Post Fermenter EU-3.09: Post Fermenter EU-3.10: Post Fermenter EU-3.11: Post Fermenter EU-3.12: Post Fermenter EU-4.01: Fermentation Residue Tank EU-4.02: Fermentation Residue Tank

[1] Some of the stream is also routed elsewhere as prescribed in Condition III.(B)(1).
[2] For this condition the Amine System (CE-3) is considered control equipment.

(2) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Initial performance testing, if required, shall be conducted in accordance with Conditions I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-7.1a	SO_2	0.061 lb/hr	3-hour rolling average	Chapter 3	No[1]
EP-7.2a		0.061 lb/hr			
EP-7.3a		0.061 lb/hr			

[1] Demonstration of compliance with the 4 ppmvd H_2S concentration limitation as prescribed in Condition (III).(A)(2)(c) demonstrates compliance with the SO_2 limitation.

(b) The volumetric concentration of Hydrogen Sulfide (H_2S) in raw biogas from the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined shall not exceed 5,000 parts per million on a dry basis (ppmvd) measured as a 3-hour rolling average. (Chapter 3)

(i) Raw biogas shall be defined as the stream of biogas exiting the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined prior to entering or being diverted elsewhere in the process.

(c) The volumetric concentration of H_2S in the RNG product gas shall not exceed 4 ppmvd measured as a 3-hour rolling average. (Chapter 3).

(i) RNG product gas shall be defined as the stream of gas located after the Amine System (CE-3) that is designed to be routed to the pipeline.

(3) Operational and Monitoring Requirements and Limitations:

(a) Permittee shall only receive raw materials from Gottsch Feeding Corporation-Juniata (FID 119), Gottsch Feeding Corporation-Red Cloud (FID 47515), and North Platte Livestock Feeders, LLC (FID 34671). (Chapter 3)

(i) Raw material shall be defined as cow manure only.

(b) All raw biogas stream for RNG production shall be routed to the Amine System (CE-3).

(i) Amine System (CE-3) shall be operated and controlling the raw biogas stream at all times when raw biogas is being routed through Amine System (CE-3).

(ii) Amine System (CE-3) shall be maintained, operated, and calibrated as recommended per the manufacturer's specifications.

(c) The permittee shall install, operate, and maintain a continuous H_2S monitor that measures H_2S concentrations of raw biogas at the outlet of the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined. The continuous H_2S monitor shall be operated in accordance with the following: (Chapter 3)

(i) The H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) The H_2S monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average.

(d) The permittee shall install, operate, and maintain continuous H_2S monitor that measures H_2S concentration of RNG product gas at the outlet of the Amine System (CE-3). The continuous H_2S monitor shall be operated in accordance with the following: (Chapter 3)

(i) The H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) The H_2S monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average.

(iv) The data shall be submitted to the Department via a report on a calendar quarterly basis, but no later than 30 days following each calendar quarter. The report shall also contain QA/QC data as part of the submittal.

(e) The flowrate of RNG product gas to startup flares (EP-7.1a, EP-7.2a, and EP-7.3a) combined shall not exceed 2,653.74 MMscf per any twelve (12) consecutive calendar months. At no time during the first eleven (11) consecutive calendar months after permit issuance shall the total flow rate of RNG product gas exceed 2,653.74 MMscf. (Chapter 3)

(i) The permittee shall install, operate, and maintain a non-resettable flow meter that measures and records the flowrate of the RNG product gas to startup flares (EP-7.1a, EP-7.2a, and EP-7.3a). The non-resettable flow meter shall be operated in accordance with the following:

1. The flow meter shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the emission points or emission units listed in Condition III.(A)(1).

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept documenting the average hourly and 3-hour rolling averages of H_2S concentrations of raw biogas, in ppmvd at the outlet of the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined and the outlet of Amine System (CE-3) for RNG product gas to demonstrate compliance with Condition III.(A)(3)(c) and Condition III.(A)(3)(d).

(b) Recordkeeping and reporting associated with the continuous H_2S monitors and flow meters shall be as follows:

(i) Calibration records shall be kept on site and readily available to NDWEE representative.

(c) Records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action conducted for the Amine System (CE-3) to show compliance with Condition III.(A)(3)(b)(ii).

(d) Records documenting the flow rate of RNG product gas, in MMscf routed to the startup flares (EP-7.1a, EP-7.2a, and EP-7.3a) for each calendar month and for each period of twelve (12) consecutive calendar months.

(B) Specific Conditions for ABS Synthesis, ATS Production, and CO_2 Production

(1) Permitted Equipment: The source is permitted to construct the emission points and associated emission units identified in the following table and controlled by the required control equipment as indicated:

Emission Point ID#	Required Control Unit ID# and Description	Process Equipment	Equipment Description
EP-6: ABS Synthesis Vent	-	-	EU-5: Sulfur Burner
EP-5: Startup Vent OR EP-2.2: CO_2 TEG Reboiler	CE-1: ThioSolv BioSWAATS Unit **AND/OR** CE-2a: H_2S Polishing Filter Train #1 CE-2b: H_2S Polishing Filter Train #1 **AND/OR** CE-2c: H_2S Polishing Filter Train #2 CE-2d: H_2S Polishing Filter Train #2	PE-3: Amine System[1], [2]	EU-1.01: Hydrolysis Tank EU-1.02: Hydrolysis Tank EU-1.03: Hydrolysis Tank EU-1.04: Hydrolysis Tank EU-1.05: Hydrolysis Tank EU-1.06: Hydrolysis Tank EU-1.07: Hydrolysis Tank EU-1.08: Hydrolysis Tank EU-1.09: Hydrolysis Tank EU-1.10: Hydrolysis Tank EU-1.11: Hydrolysis Tank EU-1.12: Hydrolysis Tank EU-2.01: Main Fermenter EU-2.02: Main Fermenter EU-2.03: Main Fermenter EU-2.04: Main Fermenter EU-2.05: Main Fermenter EU-2.06: Main Fermenter EU-2.07: Main Fermenter EU-2.08: Main Fermenter EU-3.01: Post Fermenter EU-3.02: Post Fermenter EU-3.03: Post Fermenter EU-3.04: Post Fermenter EU-3.05: Post Fermenter EU-3.06: Post Fermenter EU-3.07: Post Fermenter EU-3.08: Post Fermenter EU-3.09: Post Fermenter EU-3.10: Post Fermenter EU-3.11: Post Fermenter EU-3.12: Post Fermenter EU-4.01: Fermentation Residue Tank EU-4.02: Fermentation Residue Tank

[1] Part of the raw biogas stream is also routed elsewhere in the process as prescribed in Condition III.(A)(1).
[2] Under this operating scenario, the Amine System (PE-3) is considered process equipment.

(2) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Initial performance testing, if required, shall be conducted in accordance with Conditions I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-5	SO_2	2.90 lb/hr	3-hour rolling average	Chapter 3	No[1]
EP-6		0.89 lb/hr	3-hour rolling average		Yes

[1] Demonstration of compliance with the 147 ppmvd H_2S concentration limitation in the CO_2 product gas as prescribed in Condition (III).(B)(2)(d) demonstrates compliance with the SO_2 limitation.

(b) The volumetric concentration of H_2S in raw biogas, as defined in Condition III.(A)(2)(b)(i), from the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined shall not exceed 5,000 ppmvd measured as a 3-hour rolling average. (Chapter 3)

(c) The volumetric concentration of H_2S in the tail gas shall not exceed 15,000 ppmvd measured as a 3-hour rolling average. (Chapter 3)

(i) Tail gas shall be defined as the stream of gas exiting the Amine System (PE-3) prior to entering either the ThioSolv BioSWAATS Unit (CE-1), H_2S Polishing Filter Train #1 (CE-2a and CE-2b) or H_2S Polishing Filter Train #2 (CE-2c and CE-2d).

(d) The volumetric concentration of H_2S in CO_2 product gas at the outlet of either the ThioSolv BioSWAATS Unit (CE-1), H_2S Polishing Filter Train #1 (CE-2a and CE-2b) or H_2S Polishing Filter Train #2 (CE-2c and CE-2d) shall not exceed 147 ppmvd measured as a 3-hour rolling average. (Chapter 3)

(i) CO_2 product gas shall be defined as the stream of gas exiting either the ThioSolv BioSWAATS Unit (CE-1), H_2S Polishing Filter Train #1 (CE-2a and CE-2b) or H_2S Polishing Filter Train #2 (CE-2c and CE-2d) designated for CO_2 production.

(3) Operational and Monitoring Requirements and Limitations:

(a) Permittee shall only receive raw materials from Gottsch Feeding Corporation-Juniata (FID 119), Gottsch Feeding Corporation-Red Cloud (FID 47515), and North Platte Livestock Feeders, LLC (FID 34671). (Chapter 3)

(i) Raw material shall be defined as cow manure only.

(b) All the raw biogas stream for CO_2 production shall be routed to the Amine System (PE-3).

(i) Amine System (PE-3) shall be operated at all times when raw biogas stream is being routed through the Amine System (PE-3) for CO_2 production.

(c) The permittee shall install, operate, and maintain a continuous H_2S monitor that measures H_2S concentrations of raw biogas at the outlet of the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined. The continuous H_2S monitor shall be operated in accordance with the following: (Chapter 3)

(i) The H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) The H_2S monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average.

(d) The permittee shall install, operate, and maintain continuous H_2S monitor that measures H_2S concentrations of the tail gas at the outlet of the Amine System (PE-3). The continuous H_2S monitor shall be operated in accordance with the following: (Chapter 3)

(i) The H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) The H_2S monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average.

(e) The permittee shall install, operate, and maintain continuous H_2S monitors that measures H_2S concentrations of the CO_2 product gas at the outlet of ThioSolv BioSWAATS Unit (CE-1), at the outlet of H_2S Polishing Filter Train #1 (CE-2a and CE-2b), and at the outlet of H_2S Polishing Filter Train #2 (CE-2c and CE-2d). The continuous H_2S monitors shall be operated in accordance with the following: (Chapter 3)

(i) Each H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) Each monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration at each outlet. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average at each outlet.

(iv) The data shall be submitted to the Department via a report on a calendar quarterly basis, but no later than 30 days following each calendar quarter. The report shall also contain QA/QC data as part of the submittal.

(f) The flowrate of CO_2 product gas to the Startup Vent (EP-5) shall not exceed 130,306 scf/hr. (Chapter 2 and 3)

(i) The permittee shall install, operate, and maintain a continuous flow meter that measures the flowrate of the CO_2 product gas at the inlet of the startup vent (EP-5). The continuous flow meter shall be operated in accordance with the following:

1. The flow meter shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

2. The monitor shall record flow of CO_2 product gas a minimum of once every 15 minutes.

3. The CO_2 product gas flow rate shall be calculated on an hourly basis.

(g) Tail gas shall be controlled by the ThioSolv BioSWAATS Unit (CE-1) and/or the H_2S Polishing Filter Train #1(CE-2a and CE-2b) and/or H_2S Polishing Filter Train #2 (CE-2c and CE-2d). (Chapter 3)

(h) The operation and maintenance of the ThioSolv BioSWAATS Unit (CE-1) shall be in accordance with the following requirements: (Chapter 3)

(i) The ThioSolv BioSWAATS Unit (CE-1) shall be properly installed, operated, and maintained. The manufacturer's operation and maintenance manuals, or its equivalent, detailing proper operation, inspection, and maintenance of the ThioSolv BioSWAATS Unit (CE-1) shall be kept on site and be readily available to NDWEE representatives.

(ii) Routine observations (at least once each day of the ThioSolv BioSWAATS Unit (CE-1) operation) shall be conducted during daylight hours to determine whether there are visible emissions from the stack or vent, leaks, noise, cracks, deterioration, other indications, or other malfunctions, which may necessitate corrective action. Corrective action shall be taken immediately if necessary.

(i) The operation and maintenance of the H_2S Polishing Filter Train #1 (CE-2a, CE-2b) and H2S Polishing Filter Train #2 (CE-2c, CE-2d) shall be in accordance with the following requirements: (Chapter 3)

(i) Each H_2S Polishing Filter Train shall be properly installed, operated, and maintained. The manufacturer's operation and maintenance manual, or its equivalent, detailing proper operation, inspection and maintenance of each H_2S Polishing Filter Train shall be kept on site and readily available to NDWEE representatives. (Chapter 3)

(ii) Routine observations (at least once each day the H_2S Polishing Filter Trains are in operation) shall be conducted during daylight hours to determine whether there are visible emissions from the stack or vent, leaks, noise, cracks, deterioration, other indications, or other malfunctions, which may necessitate corrective action. Corrective action shall be taken immediately if necessary.

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the emission points or emission units listed in Condition III.(B)(1).

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept documenting the average hourly and 3-hour rolling averages of H_2S concentrations of raw biogas, in ppmvd at the outlet of the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined, the outlet of Amine System (PE-3) for tail gas, at the outlet of ThioSolv BioSWAATS Unit (CE-1), at the outlet of H_2S Polishing Filter Train #1 (CE-2a and CE-2b), and at the outlet of H_2S Polishing Filter Train #2 (CE-2c and CE-2d) to demonstrate compliance with Condition III.(B)(3)(c), and Condition III.(B)(3)(d), and Condition III.(B)(3)(e).

(b) Recordkeeping and reporting associated with the continuous H_2S monitors and flow meters shall be as follows:

(i) Calibration records shall be kept on site and readily available to NDWEE representatives.

(c) Records documenting when routine observations were performed with a description, including operating parameters and any atypical observations for the ThioSolv BioSWAATS Unit (CE-1), the H_2S Polishing Filter Train #1 (CE-2a, CE-2b), and the H_2S Polishing Filter Train #2 (CE-2c, CE-2d).

(d) Records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action conducted for the ThioSolv BioSWAATS Unit (CE-1), the H_2S Polishing Filter Train #1 (CE-2a, CE-2b), and the H_2S Polishing Filter Train #2 (CE-2c, CE-2d). Records documenting equipment failures, malfunctions, or other variations, including time of occurrence, remedial action taken, and when corrections were made for the ThioSolv BioSWAATS Unit (CE-1), the H_2S Polishing Filter Train #1 (CE-2a, CE-2b), and the H_2S Polishing Filter Train #2 (CE-2c, CE-2d).

(e) Records documenting the flow rate of CO_2 product gas, in scf/hr routed to the startup vent (EP-5) on an hourly basis.

(C) Specific Conditions for Raw Biogas Bypass

(1) Permitted Equipment: The source is permitted to construct the emission points and associated emission units identified in the following table and controlled by the required control equipment as indicated:

Emission Point ID#	Required Control Unit ID# and Description	Equipment Description
EP-5: Startup Vent AND EP-7.1b Bypass Flare AND EP-7.2b: Bypass Flare AND EP-7.3b: Bypass Flare	CE-1: ThioSolv BioSWAATS Unit **AND/OR** CE-2a: H_2S Polishing Filter Train #1 CE-2b: H_2S Polishing Filter Train #1 **AND/OR** CE-2c: H_2S Polishing Filter Train #2 CE-2d: H_2S Polishing Filter Train #2	EU-1.01: Hydrolysis Tank EU-1.02: Hydrolysis Tank EU-1.03: Hydrolysis Tank EU-1.04: Hydrolysis Tank EU-1.05: Hydrolysis Tank EU-1.06: Hydrolysis Tank EU-1.07: Hydrolysis Tank EU-1.08: Hydrolysis Tank EU-1.09: Hydrolysis Tank EU-1.10: Hydrolysis Tank EU-1.11: Hydrolysis Tank EU-1.12: Hydrolysis Tank EU-2.01: Main Fermenter EU-2.02: Main Fermenter EU-2.03: Main Fermenter EU-2.04: Main Fermenter EU-2.05: Main Fermenter EU-2.06: Main Fermenter EU-2.07: Main Fermenter EU-2.08: Main Fermenter EU-3.01: Post Fermenter EU-3.02: Post Fermenter EU-3.03: Post Fermenter EU-3.04: Post Fermenter EU-3.05: Post Fermenter EU-3.06: Post Fermenter EU-3.07: Post Fermenter EU-3.08: Post Fermenter EU-3.09: Post Fermenter EU-3.10: Post Fermenter EU-3.11: Post Fermenter EU-3.12: Post Fermenter EU-4.01: Fermentation Residue Tank EU-4.02: Fermentation Residue Tank

(2) Emission Limitations and Testing Requirements:

(a) Pollutant emission rates from each emission point identified in the table below shall not exceed the permitted limits. Initial performance testing, if required, shall be conducted in accordance with Conditions I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-7.1b	SO_2	3.37 lb/hr	3-hour rolling average	Chapter 3	No[1]
EP-7.2b		3.37 lb/hr			
EP-7.3b		3.37 lb/hr			

[1] Demonstration of compliance with the 147 ppmvd H_2S concentration limitation in the Raw biogas as prescribed in Condition (III).(C)(2)(c) demonstrates compliance with the SO_2 limitation.

(b) The volumetric concentration of H_2S in raw biogas from the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined shall not exceed 5,000 ppmvd measured as a 3-hour rolling average. (Chapter 3)

(c) The volumetric concentration of H_2S in Raw biogas at the outlet of either the ThioSolv BioSWAATS Unit (CE-1), H_2S Polishing Filter Train #1 (CE-2a and CE-2b) or H_2S Polishing Filter Train #2 (CE-2c and CE-2d) shall not exceed 147 ppmvd measured as a 3-hour rolling average. (Chapter 3)

(3) Operational and Monitoring Requirements and Limitations:

(a) Permittee shall only receive raw materials from Gottsch Feeding Corporation-Juniata (FID 119), Gottsch Feeding Corporation-Red Cloud (FID 47515), and North Platte Livestock Feeders, LLC (FID 34671). (Chapter 3)

(i) Raw material shall be defined as cow manure only.

(b) The permittee shall install, operate, and maintain a continuous H_2S monitor that measures H_2S concentrations of raw biogas at the outlet of the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined. The continuous H_2S monitor shall be operated in accordance with the following: (Chapter 3)

(i) The H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) The H_2S monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average.

(c) The permittee shall install, operate, and maintain continuous H_2S monitors that measures H_2S concentrations of the Raw biogas at the outlet of ThioSolv BioSWAATS Unit (CE-1), at the outlet of H_2S Polishing Filter Train #1 (CE-2a and CE-2b), and at the outlet of H_2S Polishing Filter Train #2 (CE-2c and CE-2d). The continuous H_2S monitors shall be operated in accordance with the following: (Chapter 3)

(i) Each H_2S monitor shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

(ii) Each monitor shall record H_2S concentrations a minimum of once every 15 minutes.

(iii) The H_2S concentrations shall be used to calculate a 1-hour average of the H_2S concentration at each outlet. The 1-hour average concentrations shall then be averaged into a 3-hour rolling average at each outlet.

(iv) The data shall be submitted to the Department via a report on a calendar quarterly basis, but no later than 30 days following each calendar quarter. The report shall also contain QA/QC data as part of the submittal.

(d) The flowrate of Raw Biogas routed to the bypass flares (EP-7.1b, EP-7.2b, and EP-7.3b) combined shall not exceed 453,721 scf/hr. (Chapter 2 and 3)

(ii) The permittee shall install, operate, and maintain a continuous flow meter that measures the total flowrate of the raw biogas to the bypass flares (EP-7.1b, EP-7.2b, and EP-7.3b) combined. The continuous flow meter shall be operated in accordance with the following:

1. The flow meter shall be maintained, operated, and calibrated as recommended in the manufacturer's specifications.

2. The monitor shall record flow of Raw biogas a minimum of once every 15 minutes.

3. The Raw biogas flow rate shall be calculated on an hourly basis.

(e) Raw biogas shall be controlled by the ThioSolv BioSWAATS Unit (CE-1) and/or the H_2S Polishing Filter Train #1 (CE-2a and CE-2b) and/or H_2S Polishing Filter Train #2 (CE-2c and CE-2d). (Chapter 3)

(f) The operation and maintenance of the ThioSolv BioSWAATS Unit (CE-1) shall be in accordance with the following requirements: (Chapter 3)

(i) The ThioSolv BioSWAATS Unit (CE-1) shall be properly installed, operated, and maintained. The manufacturer's operation and maintenance manuals, or its equivalent, detailing proper operation, inspection, and maintenance of the ThioSolv BioSWAATS Unit (CE-1) shall be kept on site and be readily available to NDWEE representatives.

(ii) Routine observations (at least once each day of the ThioSolv BioSWAATS Unit (CE-1) operation) shall be conducted during daylight hours to determine whether there are visible emissions from the stack or vent, leaks, noise, cracks, deterioration, other indications, or other malfunctions, which may necessitate corrective action. Corrective action shall be taken immediately if necessary.

(g) The operation and maintenance of the H_2S Polishing Filter Train #1 (CE-2a, CE-2b) and H2S Polishing Filter Train #2 (CE-2c, CE-2d) shall be in accordance with the following requirements: (Chapter 3)

(i) Each H_2S Polishing Filter Train shall be properly installed, operated, and maintained. The manufacturer's operation and maintenance manual, or its equivalent, detailing proper operation, inspection and maintenance of each H_2S Polishing Filter Train shall be kept on site and readily available to NDWEE representatives. (Chapter 3)

(ii) Routine observations (at least once each day the H_2S Polishing Filter Trains are in operation) shall be conducted during daylight hours to determine whether there are visible emissions from the stack or vent, leaks, noise, cracks, deterioration, other indications, or other malfunctions, which may necessitate corrective action. Corrective action shall be taken immediately if necessary.

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the emission points or emission units listed in Condition III.(C)(1).

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept documenting the average hourly and 3-hour rolling averages of H_2S concentrations of raw biogas, in ppmvd at the outlet of the Hydrolysis Tanks (EU-1.01 through EU-1.12), Main Fermenters (EU-2.01 through EU-2.08), Post Fermenters (EU-3.01 through EU-3.12) and Fermentation Residue Tanks (EU-4.01 and EU-4.02) combined, at the outlet of ThioSolv BioSWAATS Unit (CE-1), at the outlet of H_2S Polishing Filter Train #1 (CE-2a and CE-2b), and at the outlet of H_2S Polishing Filter Train #2 (CE-2c and CE-2d) to demonstrate compliance with Condition III.(C)(3)(b), and Condition III.(C)(3)(c).

(b) Recordkeeping and reporting associated with the continuous H_2S monitor and flow meters shall be as follows:

(i) Calibration records shall be kept on site and readily available to NDWEE representatives.

(c) Records documenting when routine observations were performed with a description, including operating parameters and any atypical observations for the ThioSolv BioSWAATS Unit (CE-1) and the H_2S Polishing Filters (CE-2a, CE-2b, CE-2c, and CE-2d).

(d) Records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action conducted for the ThioSolv BioSWAATS Unit (CE-1) and the H_2S Polishing Filters (CE-2a, CE-2b, CE-2c, and CE-2d).

(e) Records documenting equipment failures, malfunctions, or other variations, including time of occurrence, remedial action taken, and when corrections were made for the ThioSolv BioSWAATS Unit (CE-1) and the H_2S Polishing Filters (CE-2a, CE-2b, CE-2c, and CE-2d).

(f) Records documenting the flow rate of Raw biogas, in scf/hr routed to the bypass flares (EP-7.1b, EP-7.2b, and EP-7.3b) on an hourly basis.

(D) Specific Conditions for Flares

(1) Permitted Emission Points: The source is permitted to construct the emission points and associated emission units identified in the following table at the capacities and using the fuel types listed:

Emission Point ID#	Required Control Unit ID# and Description	Maximum Capacity (each) (MMBtu/hr)	Permitted Fuel Type
EP-7.1a	CE-7.1a: Startup Flare	100.00	RNG product gas (Flare)[1] Natural Gas (Pilot)
EP-7.2a	CE-7.2a: Startup Flare		
EP-7.3a	CE-7.3a: Startup Flare		
EP-7.1b	CE-7.1b: Bypass Flare	100.00	Raw Biogas (Flare)[2] Natural Gas (Pilot)
EP-7.2b	CE-7.2b: Bypass Flare		
EP-7.3b	CE-7.3b: Bypass Flare		

[1] The Startup flares receive RNG product gas defined in Condition III.(A)(2)(c)(i).
[2] The Bypass flares receive Raw Biogas defined in Condition III.(A)(2)(b)(i).

(2) Emission Limitations and Testing Requirements:

The NDWEE has not identified any emission limitations and testing requirements that apply to the emission units listed in Condition III.(D)(1).

(3) Operational and Monitoring Requirements and Limitations:

(a) A flame shall be present in the startup flares (CE-7.1a, CE-7.2a, and CE-7.3a) when RNG product gas is being routed to the flares. (Chapter 3)

(i) The facility shall install an appropriate safety device or flame monitoring system to ensure the presence of a flame at the flare.

(b) A flame shall be present in the bypass flares (CE-7.1b, CE-7.2b, and CE-7.3b) when Raw Biogas is being routed to the flares. (Chapter 3)

(ii) The facility shall install an appropriate safety device or flame monitoring system to ensure the presence of a flame at the flare.

(4) Applicable NSPS, NESHAP, and MACT Requirements:

The NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the emission points or emission units listed in Condition III.(D)(1).

(5) Reporting and Recordkeeping Requirements:

(a) Records shall be kept of a flame presence at the startup flares (CE-7.1a, CE-7.2a, and CE-7.3a) when in use.

(b) Records shall be kept of a flame presence at the bypass flares (CE-7.1b, CE-7.2b, and CE-7.3b) when in use.