



AIR QUALITY CONSTRUCTION PERMIT

NEW SOURCE REVIEW (NSR) CLASSIFICATION: MINOR

PERMIT NUMBER: CP26-014

NDWEE ID: 58049

121646

Program ID: AIR 001 00044

AIR 001 00147

Permit Issued To:

Chief Ethanol Fuels, Inc. – Hastings
CC Hastings Capture Company, LLC

Name of Source in Application:

Chief Ethanol Fuels, Inc. – Hastings
CC Hastings Capture Company, LLC

Mailing Address: 4225 East South Street, STE A, Hastings, Adams County, Nebraska

Source Location: 4225 East South Street, STE B, Hastings, Adams County, Nebraska

Project Description: MINOR NSR SOURCE – SIGNIFICANT PERMIT REVISION of an ethanol plant to increase ethanol production to 115 million gallons of denature ethanol annually.

Standard Industrial Classification (SIC) Code: 2869, Industrial Organic Chemicals, Not Elsewhere Classified
4619, Pipelines, Not Elsewhere Classified

North American Industry Classification System (NAICS) Code: 325196, Ethyl Alcohol Manufacturing
486990, All Other Pipeline Transportation

Revised or Superseded Construction Permits: This construction permit supersedes Condition III.(F) of CP25-030 (issued July 6, 2026), Condition III.(E) of CP25-014 (issued January 26, 2026), Conditions III.(C) and (D) of CP24-010 (issued May 7, 2025), Conditions XIII.(H), (J), (K), and (L)(8), (L)(10), and (L)(11)(e) of CP20-012 (issued August 18, 2020), and Condition III.(A) of CP17-010 (issued July 12, 2027). No other terms or conditions of the original construction permits are being revised or otherwise modified by this document. All other provisions of the original permits are still in effect, and in concert with this permit, constitute the effective construction permit.

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 #26-014 received April 17, 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 project, including estimated pollutant emissions caused by the project, 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 on June 28, 2026.

DRAFT

Date

Reuel S. Anderson, Administrator
Permitting and Engineering Division

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ABBREVIATIONS, SYMBOLS, and UNITS OF MEASURE

AP-42	Compilation of Air Pollutant Emission Factors, Volume I, Stationary Point and Area Sources	MMBtu	One Million British Thermal Units
BACT	Best Available Control Technology	MMscf	One Million Standard Cubic Feet
bhp	Brake Horsepower	MSDS	Material Safety Data Sheet
BMP	Best Management Practice	MW	Megawatt
Btu	British Thermal Unit	NAAQS	National Ambient Air Quality Standards
bu	Bushel	NDWEE	Nebraska Department of Water, Energy, and Environment
CAA	Clean Air Act	NESHAP	National Emission Standards for Hazardous Air Pollutants
CE	Control Equipment	NO ₂	Nitrogen Dioxide
CEM	Continuous Emissions Monitor	NO _x	Nitrogen Oxides
CEMS	Continuous Emissions Monitoring System	NSPS	New Source Performance Standard
cf	Cubic feet	NSR	New Source Review
CFR	Code of Federal Regulations	PAL	Plant-wide Applicability Limit
CI	Compression Ignition	Pb	Lead (chemical abbreviation)
CO	Carbon Monoxide	PbR	Permit-by-Rule
CO ₂	Carbon Dioxide	PEMS	Predictive Emissions Monitoring System
CO ₂ e	CO ₂ equivalent	PM	Particulate Matter
COMS	Continuous Opacity Monitoring System	PM ₁₀	Particulate Matter with and aerodynamic diameter equal to or less than 10 microns
CP	Construction Permit	PM _{2.5}	Particulate Matter with and aerodynamic diameter equal to or less than 2.5 microns
DDGS	Dry Distillers Grains with Solubles	ppb	Parts per Billion
DGS	Distiller's Grains with Solubles	ppm	Parts per Million
dscf	Dry Standard Cubic Feet	ppmv	Parts per Million by volume
dscfm	Dry Standard Cubic Feet per Minute	ppmvd	Parts per Million by volume, dry basis
EMIS	Emergency Management Information System	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	Potential to Emit
EPA	Environmental Protection Agency	RATA	Relative Accuracy Test Audit
EQC	Environmental Quality Council	RICE	Reciprocating Internal Combustion Engine
ESP	Electrostatic Precipitator	RMP	Risk Management Plan
EU	Emission Unit	RTO	Regenerative Thermal Oxidizer
FDCP	Fugitive Dust Control Plan	RVP	Reid Vapor Pressure
FGR	Flue Gas Recirculation	scf	Standard Cubic Feet
FID	Facility Identification Number	SI	Spark Ignition
FIP	Federal Implementation Plan	SIC	Standard Industrial Classification
FR	Federal Register	SIP	State Implementation Plan
ft	Feet	SO ₂	Sulfur Dioxide
FTIR	Fourier Transform Infrared	SO _x	Sulfur Oxides
GHGs	Greenhouse Gases	TDS	Total Dissolved Solids
H ₂ S	Hydrogen Sulfide	TO	Thermal Oxidizer
HAP	Hazardous Air Pollutant	TO/HRSG	Thermal Oxidizer with Heat Recovery Steam Generator
hp	Horsepower	tpy	Tons per year
hr	Hour	TRS	Total Reduced Sulfur
kWh	Kilowatt hours	TSP	Total Suspended Particulate Matter
lb	Pound	ULNB	Ultra Low-NO _x Burner
LDAR	Leak Detection and Repair	UST	Underground Storage Tank
LNB	Low-NO _x Burner	UTM	Universal Transverse Mercator
MACT	Maximum Achievable Control Technology	VHAP	Volatile Hazardous Air Pollutant
Mgal	One Thousand gallons	VMT	Vehicle Miles Traveled
		VOC	Volatile Organic Compound
		WDGS	Wet Distiller's Grains with Solubles

SUMMARY OF REVISIONS

Although this permit completely supersedes permits CP17-010, CP24-010, CP25-014, and CP25-030 and parts of CP20-012, only the following permit conditions have been significantly revised or updated.

Permit Condition / Summary of Revision	Page
I. – Standard Conditions have been updated to the Department’s most current format.	I-1
II. – General Construction Permit Conditions have been updated to the Department’s most current format.	II-1
III.(A) – The natural gas fired boiler condition has been revised to Department’s most current format and now includes a combined annual MMBtu/yr limitation and NO _x emission limits for EP-39.	A-1
III.(B) – Fermentation scrubber (C-1404A) now is required to control new distillation equipment. A new grouped emissions limit was placed on VOC, Acetaldehyde, Acrolein, and Methanol.	B-1
III.(C) – New specific condition for DDGS dryers and coolers. VOC, Acetaldehyde, Acrolein, and Methanol emission limits are grouped with the fermentation scrubber. DDGS dryer stacks each have a PM _{2.5} major modification avoidance limitation.	C-1
III.(D) – DDGS and grain receiving, handling, and storage revised to include new DDGS loadout and a new grouped PM limit. Also includes existing DDGS transfer equipment decommissioning requirements.	D-1
III.(E) – West grain elevator now includes a 140,000 tons per year receiving limitation.	E-1
III.(F) – Cooling Tower C TDS concentration reduced from 7,000 ppm to 2,500 ppm.	F-1
III.(G) – Equipment leaks now identify VV, VVa, and VVb as potentially applicable subparts.	G-1
III.(H) – The storage tank condition has been revised to Department’s most current format and added storage tanks, a control devise for two new tanks, and lists newly applicable NSPS subparts.	H-1
III.(I) – The ethanol loadout condition has been revised to Department’s most current format and added new loadout and control equipment. Also includes existing loadout and control equipment decommissioning requirements	I-1
III.(J) – The haul road condition was not significantly revised, but brought forward so that new roads from this project are paved as required.	J-1
III.(K) – The existing distillation scrubbers (S-1501 and C-11533) and their associated equipment were brought forward with this project with new decommissioning requirements.	K-1
III.(L) – The existing DDGS Dryer scrubber (C-11801) and its associated equipment were brought forward with this project with new decommissioning requirements.	L-1

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 June 28, 2026 (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).

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- (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 (15th) 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).
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- (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,
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- (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.
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- (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.
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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 the Boilers

- (1) Permitted Emission Points: The source is permitted to construct the emission points identified in the following table at the capacities, shall be controlled by the control equipment, and using the fuel types as indicated:

Emission Point ID#	Required Control Equipment ID# and Description	Emission Unit ID# and Description	Maximum Capacity	Permitted Fuel Type
EP-16	Low NO _x multistage combustion burners	EU-16.1: Boiler 1	249 MMBtu/hr	Natural Gas
EP-39	Low NO _x burner	EU-39.1: Boiler 2	152.5 MMBtu/hr	Natural Gas

(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.

EP ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Initial Performance Testing Required
EP-16	NO _x	0.10 lb/MMBtu	30-day rolling average	Chapters 3, 4, and 12	No ^{[1][2]}
EP-39	NO _x	0.10 lb/MMBtu	30-day rolling average	Chapters 3 and 12	No ^[1]

^[1] A Continuous Emission Monitor (CEM) or other approved alternative monitoring plan is required by NSPS Subpart Db for EP-16 and EP-39 and is utilized to demonstrate compliance with the NO_x limits and heat value limit in Condition III.(A)(3)(a).

^[2] Boiler 1 (EU-16.1) has established BACT limitations of 0.16 lb/MMBtu and 117.3 ton/yr. Compliance with these BACT limitations is demonstrated through compliance with the more restrictive 0.10 lb/MMBtu emissions standard in NSPS Db.

- (b) The source shall comply with applicable emission limitations and testing requirements of NSPS Subparts A and Db. (Chapter 12)

(3) Operational and Monitoring Requirements and Limitations:

- (a) The total combined heat input from the boilers (EU-16 and EU-39) shall not exceed 1,576,800 MMBtu per any period of twelve (12) consecutive calendar months. At no time during the first eleven (11) months after the permit issuance shall the heat input combusted by the boilers exceed 1,576,800 MMBtu. (Chapters 2 and 3)
- (i) To demonstrate compliance with the above heat input limit the source shall use the following calculation methodology:
1. The natural gas flow rate for each boiler shall be recorded on a monthly total basis and the record shall be kept onsite.
 2. The heat value of the natural gas, as documented by the supplier on a monthly basis, shall be kept onsite.
 3. The monthly heating value of natural gas and the monthly total flow rates for each boiler shall be used to determine the monthly heat input of each natural gas boiler.
- (b) The source shall comply with applicable operational and monitoring requirements of NSPS Subparts A and Db. (Chapters 12)
- (i) The source is subject to the operational and monitoring requirements of 40 CFR §60.46b and §60.47b.

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

(a) The following NSPS standards apply to the Boilers (EU-16 and EU-39):

Applicable Standard	Title	Rule Citation
NSPS, Subpart A	General Provisions	Title 129, Chapter 12, Section <u>001.01</u> 40 CFR §60.1
NSPS, Subpart Db	Standards of Performance for Industrial, Commercial, & Institutional Steam Generating Units	Title 129, Chapter 12, Section <u>001.04</u> 40 CFR §60.40b

(5) Recordkeeping and Reporting Requirements:

The source is required to maintain the following records:

- (a) Records of the calculations and total combined heat input, in MMBtu, from the boilers (EU-16 and EU-39) for each calendar month and each period of twelve (12) consecutive calendar months.
- (b) Records documenting compliance with applicable notifications, recordkeeping, and reporting requirements of NSPS, Subparts A and Db.
 - (i) The source is subject to the reporting and recordkeeping requirements of 40 CFR §60.48b.

III.(B) Specific Conditions for Fermentation Scrubber and Carbon Capture Operations

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

Emission Point ID#	Required Control Equipment ID# and Description	Emission Unit ID# and Description
EP-8-4 or EP-CC-03	C-1404A: Fermentation Scrubber #4	EU-8.3: Fermentation Tank #2A, 78,762 gallons maximum capacity
		EU-8.4: Fermentation Tank #2B, 78,762 gallons maximum capacity
		EU-8.5: Fermentation Tank #3A, 159,679 gallons maximum capacity
		EU-8.6: Fermentation Tank #3B, 159,679 gallons maximum capacity
		EU-8.7: Fermentation Tank #4A, 159,679 gallons maximum capacity
		EU-8.8: Fermentation Tank #4B, 159,679 gallons maximum capacity
		EU-8.9: Fermentation Tank #5A, 272,000 gallons maximum capacity
		EU-8.10: Fermentation Tank #5B, 272,000 gallons maximum capacity
		EU-8.11: Fermentation Tank #5C, 925,000 gallons maximum capacity
		EU-8.12: Fermentation Tank #6, 705,000 gallons maximum capacity
		EU-8.13: Beer Well Tank #7, 705,000 gallons maximum capacity
		EU-8.14: Fermentation Tank #5D, 925,000 gallons maximum capacity
		EU-8.15: Beer Degas
		EU-8.16: Stripping Column
		EU-8.17: Beer Column #1
		EU-8.18: Beer Column #2
		EU-8.19: Dehydration Membranes
EP-CC-03	N/A	EU-CC-03: TEG Reboiler Still Vent
EP-CC-FUG	N/A	EU-CC-01: CO ₂ Compressor Rodpacking
		EU-CC-02: CO ₂ Blowdown Vapors
		EU-CC-04: Equipment Leaks

(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. Performance testing, if required, shall be conducted in accordance with Condition I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Initial Performance Testing Required (Yes/No)
EP-8-4, EP-CC-03 ^[2] , and EP-CC-FUG ^[2]	VOC	29.78 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Acetaldehyde	2.07 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Acrolein	0.63 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Formaldehyde	0.27 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Methanol	0.69 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
EP-8-4, EP-CC-03, and EP-CC-FUG	VOC	8.30 lb/hr ^[3]	Three 1-hour test runs or test method average	Chapter 3	No
	Acetaldehyde	2.15 lb/hr ^[3]	Three 1-hour test runs or test method average	Chapter 3	No

^[1] Total combined emissions limitations on emission points EP-8-4, EP-102, EP-103, EP-104, EP-105, EP-CC-03, and EP-CC-FUG.

^[2] Performance testing on EP-CC-03 and EP-CC-FUG is not required because emissions controlled by C-1404A are representative of emissions emitted out of EP-8-4 and combined emissions emitted out of EP-CC-03 and EP-CC-FUG.

^[3] The existing combined emissions limitations on EP-8-4, EP-9, EP-10, EP-13, EP-CC-03, and EP-CC-FUG will not be in affect after units associated with EP-9, EP-10, and EP-13 are decommissioned.

- (b) To demonstrate compliance with any combined limitation prescribed in Condition III.(B)(2)(a): (Chapters 3 and 15)
- (i) Performance testing shall be conducted concurrently for EP-8-4, EP-102, EP-103, EP-104, and EP-105.
 - (ii) Performance test port(s) for the exhaust from C-1404A shall be located prior to the connection to the carbon capture facility.
 - 1. The test port(s) shall be representative of the entire flow of the gas from C-1404A.

(3) Operational and Monitoring Requirements and Limitations:

- (a) Operation and maintenance of the scrubber (C-1404A) shall be in accordance with the following requirements unless otherwise stated in an active Operating Permit. (Chapter 3)
- (i) C-1404A shall be operated and control emissions at all times when any of the associated emission units are in operation.
 - 1. The vapor stream from emission units EU-8.3 through EU-8.19 shall be controlled by C-1404A, regardless of whether the vapor stream is released to ambient air or routed elsewhere.
 - (ii) C-1404A shall be equipped with devices that continuously monitor and record the following operating parameters:

-
1. Scrubbing liquid flow rate;
 2. Recirculation liquid flow rate;
 3. Chemical addition flow rate, if utilized;
 4. Scrubber pressure differential;
 5. Scrubbing liquid temperature; and
 6. Recirculation liquid inlet temperature.
- (iii) If chemical addition is utilized, the total monthly amount of chemical, in gallons, added to C-1404A shall be monitored and recorded.
- (iv) If chemical addition is utilized, upon request by NDWEE personnel, chemical drawdown checks shall be performed to verify that the flow meter is working correctly.
- (v) The following operating parameters of C-1404A shall be maintained as described below:
1. The scrubbing liquid temperature shall be maintained at or below the tested level(s) recorded during the most recent valid performance test under normal operating conditions.
 2. The recirculation scrubbing liquid temperature shall be maintained at or below the tested level(s) recorded during the most recent valid performance test under normal operating conditions.
 3. The scrubbing liquid flow rate, recirculation flow rate, flow rate of chemical additions (if utilized), and concentration of the chemical injected into the scrubber (if utilized) shall be maintained at or above the levels recorded during testing. If chemical is added, the chemical concentration, as documented by the supplier, shall be recorded upon use of the chemical.
- (vi) Observations at least once each day during daylight hours of scrubber operation shall be conducted to determine whether there are leaks, noise, or other indications that corrective action is necessary. If corrective action is necessary, it shall occur immediately.
- (vii) Flow meters for recording scrubbing liquid, recirculation liquid, and chemical addition flow rates shall be maintained and calibrated according to manufacturer's instructions.
- (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:
The owner or operator shall maintain the following records:
- (a) Records that document the continuously monitored operating parameter data for the scrubber (C-1404A), including the date and time of the readings. The records shall include:
 - (i) Scrubbing liquid flow rate;
 - (ii) Recirculation liquid flow rate;
-

- (iii) Chemical addition flow rate, if utilized;
 - (iv) Scrubber pressure differential;
 - (v) Scrubbing liquid temperature readings; and
 - (vi) Recirculation liquid inlet temperature.
- (b) If chemical addition is utilized, monthly records that document the purchase date, concentration, amount, and type of chemical purchased for chemical injection associated with C-1404A.
- (c) Records that document the operating parameters developed during the most recent valid performance test conducted at the facility.
- (d) Records that document the date and time of routine observations with a description, including operating parameters, atypical parameters observed, and any corrective actions taken, for each day C-1404A is in operation.
- (e) Records that document the date and time of routine maintenance, preventive actions performed, and corrective actions performed that include a description of the actions performed.
- (f) Records that document any yeast strains and/or enzyme changes, including the name or identifier of the strain/enzyme and the date the change occurred.
- (g) Within fifteen (15) business days after any one of the Beer Degas units (EU-8-15), Stripping Column (EU-8-16), Beer Columns #1 and #2 (EU-8-17 and EU-8-18), or Dehydration Membranes (EU-8-19) are installed and commissioning begins, the permittee shall provide the NDWEE with written or electronic notice.

III.(C) Specific Conditions for DDGS Dryer and Cooler

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

Emission Point ID#	Required Control Equipment ID# and Description	Emission Unit Description	Permitted Fuel Type
EP-102	C-102.1: TO/HRSG	EU-102.1: Swiss-Combi ecoDry DDGS Dryer #1 with Cyclone, 75 MMBtu/hr	Natural Gas and Process Gas
		EU-112.1: Gas Heated Evaporator Chest #1 (shell side)	-
EP-103	C-103.1: TO/HRSG	EU-103.1: Swiss-Combi ecoDry DDGS Dryer #2 with Cyclone, 75 MMBtu/hr	Natural Gas and Process Gas
		EU-112.2: Gas Heated Evaporator Chest #2 (shell side)	-
EP-104	-	EU-104.1: DDGS Dryer #1 Cooling Tube with Pneumatic Transfer System Filter	-
EP-105	-	EU-105.1: DDGS Dryer #2 Cooling Tube with Pneumatic Transfer System Filter	-

- (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. Performance testing, if required, shall be conducted in accordance with Condition I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Initial Performance Testing Required (Yes/No)
EP-102 and EP-103	PM _{2.5}	2.78 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
EP-102, EP-103, EP-104, and EP-105	VOC	29.78 lb/hr ^[2]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Acetaldehyde	2.07 lb/hr ^[2]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Acrolein	0.63 lb/hr ^[2]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Formaldehyde	0.27 lb/hr ^[2]	Three 1-hour test runs or test method average	Chapter 3	Yes
	Methanol	0.69 lb/hr ^[2]	Three 1-hour test runs or test method average	Chapter 3	Yes

^[1] Total combined PM_{2.5} emissions limitation on emission points EP-102 and EP-103.

^[2] Total combined emissions limitations on emission points EP-8-4, EP-102, EP-103, EP-104, EP-105, EP-CC-03, and EP-CC-FUG.

- (b) To demonstrate compliance with any combined limitation prescribed in Condition III.(B)(2)(a): (Chapters 3 and 15)
- (i) Performance testing shall be conducted concurrently for EP-8-4, EP-102, EP-103, EP-104, and EP-105.
- (3) Operational and Monitoring Requirements and Limitations:
- (a) Operation and maintenance of the TO/HRSG units (C-102.1 and C-103.1) shall be in accordance with the following requirements. (Chapter 3)
- (i) The TO/HRSG units shall be equipped with a thermocouple or equivalent device capable of continuously monitoring and recording the temperature of the TO/HRSG. The thermocouple or equivalent device shall monitor temperature on a continuous basis, with the one-hour average temperature recorded once per hour. The thermocouple or equivalent device shall be properly installed, operated, and maintained in accordance with manufacturer recommendations. Manufacturer's documentation shall be kept on site and readily available to NDWEE representatives.
- (ii) The one-hour average operating temperature of each of the TO/HRSG units shall be maintained at a minimum 1,400°F. After completion of valid performance testing as prescribed in Condition III.(C)(2)(a), the one-hour average operating temperature of each thermal oxidizer unit shall be at or above the temperature recorded during the most recent valid performance test.
- (ii) Routine observations (at least once each day of TO/HRSG operation) shall be conducted to determine whether there are visible emissions from the stack, leaks, noise, atypical operating parameters (e.g., temperature), or other indications that may necessitate corrective action. Corrective action shall be taken immediately, if necessary.
- (4) Applicable NSPS, NESHAP, and MACT Requirements:
- (a) The following NSPS standards apply to the Dryers (EU-102.1 and EU-103.1):

Applicable Standard	Title	Rule Citation
NSPS, Subpart A	General Provisions	Title 129, Chapter 12, Section <u>001.01</u> 40 CFR §60.1
NSPS, Subpart Dc	Standards of Performance for Small Industrial, Commercial, & Institutional Steam Generating Units	Title 129, Chapter 12, Section <u>001.05</u> 40 CFR §60.40c

(5) Reporting and Recordkeeping Requirements:

The owner or operator shall maintain the following records:

- (a) Records documenting the temperature of the TO/HRSG units (C-102.1 and C103.1), including hourly temperature readings while the associated emission units are in operation
- (b) Records that document the date and time of routine observations with a description, including operating parameters, atypical parameters observed, and any corrective actions taken.
- (c) Records that document the date and time of routine maintenance, preventive actions performed, and correction actions taken that include a description of the actions performed.
- (d) Within fifteen (15) business days after any one DDGS Dryer (EU-102.1 or EU-103.1) or any one DDGS Cooler (EU-104.1 or EU-105.1) is installed and commissioning begins, the permittee shall provide the NDWEE with written or electronic notice.

III.(D) Specific Conditions for Grain and DDGS Receiving, Handling, and Storage

- (1) Permitted Emission Points: The source is permitted to construct the emission points and associated emission units identified in the following table at the capacity listed and shall be controlled by the required control equipment as indicated:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Maximum Capacity
EP-1.1	CE-1.1: Grain Receiving Baghouse	EU-1.11: Grain Receiving Pit 1	20,000 bu/hr
		EU-1.12: Grain Receiving Pit 2	30,000 bu/hr
		EU-1.13: Grain Receiving Pit 3	30,000 bu/hr
EP-1.2A	CE-1.2A: Grain Bin Fill Leg 1 Spot Filter	EU-1.21: Grain Receiving Conveyor A	10,000 bu/hr
		EU-1.22: Grain Receiving Conveyor B	10,000 bu/hr
		EU-1.23: Grain Receiving Conveyor 1	30,000 bu/hr
		EU-1.25: Grain Bin Fill Leg 1	30,000 bu/hr
		EU-1.27: Bin 01/02 Fill Conveyor 1	30,000 bu/hr
		EU-1.28: Bin 01/02 Fill Conveyor 2	30,000 bu/hr
		EU-1.29: Bin 03 Fill Conveyor	30,000 bu/hr
EP-1.2B	CE-1.2B: Grain Bin Fill Leg 2 Spot Filter	EU-1.24: Grain Receiving Conveyor 2	30,000 bu/hr
		EU-1.26: Grain Bin Fill Leg 2	30,000 bu/hr
		EU-1.27: Bin 01/02 Fill Conveyor 1	30,000 bu/hr
		EU-1.28: Bin 01/02 Fill Conveyor 2	30,000 bu/hr
		EU-1.29: Bin 03 Fill Conveyor	30,000 bu/hr
EP-2.1	-	EU-2.1: Grain Bin 1	854,096 bu
EP-2.2	-	EU-2.2: Grain Bin 2	854,096 bu
EP-2.3	-	EU-2.3: Grain Bin 3	854,096 bu
EP-3.1	CE-3.1: Grain Bin Reclaim Leg Spot Filter	EU-3.11: Bin 01/02 Reclaim Conveyor	10,000 bu/hr
		EU-3.12: Bin 03 Reclaim Conveyor	10,000 bu/hr
		EU-3.13: Reclaim Leg Feed Conveyor	20,000 bu/hr
		EU-3.14: Grain Reclaim Leg	20,000 bu/hr
EP-3.2	CE-3.2: Bulk Weigher Vent Filter	EU-3.21: Bulk Weigher	10,000 bu/hr
EP-5.1	CE-5.1: Surge Bin 1 Vent Filter	EU-5.0: Hammermill Feed Conveyor	20,000 bu/hr
		EU-5.1: Hammermill Surge Bin 1	12,000 bu
EP-5.2	CE-5.2: Surge Bin 2 Vent Filter	EU-5.0: Hammermill Feed Conveyor	20,000 bu/hr
		EU-5.2: Hammermill Surge Bin 2	12,000 bu
EP-5.3	CE-5.3: Surge Bin 3 Vent Filter	EU-5.0: Hammermill Feed Conveyor	20,000 bu/hr
		EU-5.3: Hammermill Surge Bin 3	12,000 bu
EP-5.4	CE-5.4: Surge Bin 4 Vent Filter	EU-5.0: Hammermill Feed Conveyor	20,000 bu/hr
		EU-5.4: Hammermill Surge Bin 4	12,000 bu
EP-6.1	CE-6.1: Hammermill 1 Baghouse	EU-6.11: Hammermill 1	30,000 bu/day
		EU-6.12: Ground Meal Conveyor 1	2,017 bu/hr
EP-6.2	CE-6.2: Hammermill 2 Baghouse	EU-6.21: Hammermill 2	30,000 bu/day
		EU-6.22: Ground Meal Conveyor 2	2,017 bu/hr

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Maximum Capacity
EP-6.3	CE-6.3: Hammermill 3 Baghouse	EU-6.31: Hammermill 3	30,000 bu/day
		EU-6.32: Ground Meal Conveyor 3	2,017 bu/hr
EP-6.4	CE-6.4: Hammermill 4 Baghouse	EU-6.41: Hammermill 4	30,000 bu/day
		EU-6.42: Ground Meal Conveyor 4	2,017 bu/hr
EP-7.1	CE-7.1: Meal Conveyor Spot Filter	EU-7.11: Ground Meal Reclaim Conveyor	12,000 bu/hr
		EU-7.12: Meal Screw to Mixer MB-1301	4,320 bu/hr
		EU-7.13: Meal Screw to Mixer MB-1302	4,320 bu/hr
EP-111	CE-111: DDGS Truck and Rail Loadout Building Filter	EU-111.2: DDGS Truck Loadout	200 ton/hr
		EU-111.3: DDGS Rail Loadout	200 ton/hr
EP-111.1	-	EU-111.1 DDGS Loadout Conveying	200 ton/hr
EP-11 ^[1]	F-6201: A&B DDGS Transfer Baghouse	EU-11.1: A Dryer DDGS Transfer	100 ton/day
		EU-11.2: B Dryer DDGS Transfer	100 ton/day
EP-20 ^[1]	-	EU-20.1: DDGS Loadout	50 ton/hr

^[1] Emission units associated with EP-11 and EP-20 will be decommissioned as a result of this permit.

(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. Performance testing, if required, shall be conducted in accordance with Condition I.(M) and Condition II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-1.1, EP-6.1, EP-6.2, EP-6.3, EP-6.4, and EP-111	PM	3.18 lb/hr ^[1]	Three 1-hour test runs or test method average	Chapter 3	Yes
EP-1.1, EP-6.1, EP-6.2, EP-6.3, EP-6.4, and EP-11	PM	5.44 lb/hr ^[2]	Three 1-hour test runs or test method average	Chapter 3	No

^[1] Combined emission limit for EP-1.1, EP-6.1, EP-6.2, EP-6.3, EP-6.4, and EP-111.

^[2] The existing combined emissions limitations on EP-1.1, EP-6.1, EP-6.2, EP-6.3, EP-6.4, and EP-11 will not be in effect after units associated with EP-11 are decommissioned.

- (b) To demonstrate compliance with any combined limitations prescribed in Condition III.(D)(2)(a): (Chapters 3 and 15)
- (i) Initial performance testing shall be conducted concurrently for EP-1.1, EP-6.1, EP-6.2, EP-6.3, EP-6.4, and EP-111.
- (c) The emission limitations and testing requirements of 40 CFR Part 60 NSPS Subparts A and DD apply to emission units EU-1.11, EU-1.12, EU-1.13, EU-1.21, EU-1.22, EU-

1.23, EU-1.24, EU-1.25, EU-1.26, EU-1.27, EU-1.28, EU-1.29, EU-3.11, EU-3.12, EU-3.13, EU-3.14, EU-3.21, and EU-5.0. (Chapter 12)

(3) Operational and Monitoring Requirements and Limitations:

- (a) Emissions from the emission points identified in Condition III.(F)(1) shall be controlled by pollution control equipment as follows: EU-1.11, EU-1.12, and EU-1.13 shall be controlled by baghouse CE-1.1; EU-1.21, EU-1.22, EU-1.23, EU-1.25, EU-1.27, EU-1.28, and EU-1.29 shall be controlled by filter CE-1.2A; EU-1.24, EU-1.26, EU-1.27, EU-1.28, and EU-1.29 shall be controlled by filter CE-1.2B; EU-3.11, EU-3.12, EU-3.13, and EU-3.14 shall be controlled by filter CE-3.1; EU-3.21 shall be controlled by filter CE-3.2; EU-5.0 and EU-5.1 shall be controlled by filter CE-5.1; EU-5.0 and EU-5.2 shall be controlled by filter CE-5.2; EU-5.0 and EU-5.3 shall be controlled by filter CE-5.3; EU-5.0 and EU-5.4 shall be controlled by filter CE-5.4; EU-6.11 and EU-6.12 shall be controlled by baghouse CE-6.1; EU-6.21 and EU-6.22 shall be controlled by baghouse CE-6.2; EU-6.31 and EU-6.32 shall be controlled by baghouse CE-6.3; EU-6.41 and EU-6.42 shall be controlled by baghouse CE-6.4; EU-7.11, EU-7.12, and EU-7.13 shall be controlled by filter CE-7.1; EU-11.1 and EU-11.2 shall be controlled by baghouse F-6201; EU-111.2 and EU-111.3 shall be controlled by filter CE-111. (Chapter 3)
- (b) The operations of each dry dust collector (baghouse or filter) identified in Condition III.(D)(1) shall be in accordance with the following requirements: (Chapter 3)
 - (i) The dry dust collectors shall be operated whenever the associated emission units are in operation.
 - (ii) The dry dust collectors shall be properly installed, operated, and maintained.
 - (iii) Each dry dust collector shall be equipped with an operational pressure differential indicator.
 - (iv) The pressure indicator shall be properly installed, operated, calibrated, and maintained.
 - (v) Dry dust collector filter bags/cartridges are to be inspected and/or replaced according to the manufacturer's documentation or more frequently as indicated by pressure differential indicator readings.
 - (vi) Routine observations (at least once each day of dry dust collector operation) shall be conducted to determine whether there are visible emissions from the stack, leaks, noise, atypical pressure differential readings, or other indications, which may necessitate corrective action. Corrective action shall be taken immediately if necessary.
 - (vii) Collected waste material from the dry dust collectors shall be handled, transported, and stored in a manner that ensures compliance with Condition I.(L)(1).
- (c) The operational and monitoring requirements of 40 CFR part 60 NSPS Subparts A and DD apply to emission units EU-1.11, EU-1.12, EU-1.13, EU-1.21, EU-1.22, EU-1.23, EU-1.24, EU-1.25, EU-1.26, EU-1.27, EU-1.28, EU-1.29, EU-3.11, EU-3.12, EU-3.13, EU-3.14, EU-3.21, and EU-5.0. (Chapter 12)
- (d) Upon commissioning of any of the DDGS loadout and conveying units (EU-111.1, EU-111.2, or EU-111.3), emission units associated with EP-11 shall be decommissioned within sixty (60) days. (Chapter 3)

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

Applicable Standard	Title	Rule Citation
NSPS Subpart A	General Provisions	Title 129, Chapter 12, Sec. <u>001.01</u> 40 CFR 60.1
NSPS Subpart DD	Standards of Performance for Grain Elevators	Title 129, Chapter 12, Sec. <u>001.36</u> 40 CFR 60.300

(5) Reporting and Recordkeeping Requirements:

The owner or operator shall maintain the following records:

- (a) Pressure differential indicator readings shall be recorded at least once each day that the associated dry dust collector is operating.
- (b) Inspection and maintenance records for the dry dust collectors identified in Condition III.(D)(1) to demonstrate compliance with Condition III.(D)(3)(b) shall include the following:
 - (i) Records documenting when routine observations were performed with a description, including operating parameters (e.g., pressure differential readings) and any atypical observations.
 - (ii) Records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action conducted.
 - (iii) Filter replacement records including filter position, type, and date of filter installation.
 - (iv) Records documenting equipment failures, malfunctions, or other variations, including time of occurrence, remedial action taken, and when corrections were made.
- (c) The reporting and recordkeeping requirements of 40 CFR part 60 NSPS Subparts A and DD apply to emission units EU-1.11, EU-1.12, EU-1.13, EU-1.21, EU-1.22, EU-1.23, EU-1.24, EU-1.25, EU-1.26, EU-1.27, EU-1.28, EU-1.29, EU-3.11, EU-3.12, EU-3.13, EU-3.14, EU-3.21, and EU-5.0.
- (d) Within fifteen (15) business days after the DDGS loadout and conveying units (EU-111.1, EU-111.2, or EU-111.3) are commissioned, the source shall provide the NDWEE with written or electronic notice.
- (e) Within fifteen (15) business days after EU-11.1, EU-11.2, and EU-20.1 are decommissioned, the source shall provide the NDWEE with written or electronic notice.

III.(E) Specific Conditions for West Grain Receiving, Handling, Storage, and Loadout

- (1) Permitted Emission Points: The source is permitted to construct the emission points and associated emission units with associated control devices as identified in the following table:

Emission Point ID#	Required Control Equipment	Emission Unit ID# and Description
EP-1.1W	CE-1W: Receiving/Loadout Baghouse	EU-1.1W: West Grain Receiving Pit
		EU-1.2W: West Grain Receiving Conveyor
		EU-1.3W: West Grain Receiving Elevator
		EU-1.4W: West Bin Loading Conveyor
		EU-1.5W: West Bin Loadout Conveyor
		EU-1.6W: West Loadout Elevator
		EU-1.7W: West Loadout Conveyor
		EU-1.8W: West Grain Loadout Bin
		EU-1.9W: West Loadout Bin Unloading Conveyor
		EU-1.10W: West Grain Loadout
EP-2.1W	-	EU-2.1W: West Storage Bin

- (2) Emission Limitations and Testing Requirements:

The emissions limitations of Title 129, Chapter 15, Sections 001 and 004 apply to the emission points listed in Condition III.(E)(1). (Chapter 15)

- (3) Operational and Monitoring Requirements and Limitations:

- (a) Emissions from the emission units in Condition III.(E)(1) shall be controlled as described in Condition III.(E)(1). (Chapter 3)
- (b) Loadout and receiving (EU-1.1W and EU-1.10W) shall occur in an enclosure with at least two sides. Grain handling (EU-1.2W through EU-1.7W and EU-1.9W) shall use enclosed conveyors and elevators. (Chapter 3)
- (c) The source shall not receive more than a total of 140,000 tons of grain through EU-1.1W per any period of twelve (12) consecutive calendar months. At no time during the first eleven (11) calendar months after permit issuance shall the source receive a total of more than 140,000 tons of grain through EP-1.1W. (Chapter 3)
- (d) Operation and maintenance of the baghouse (CE-1W) shall be in accordance with the following requirements: (Chapter 3)
 - (i) The baghouse shall be operated and be controlling emissions at all times when the associated emission units are in operation.
 - (ii) The baghouse shall be equipped with an operational pressure differential indicator. Pressure differential readings shall be recorded at least once each day that the baghouse is operating.
 - (iii) Baghouse filter bags are to be inspected and/or replaced as often as necessary to ensure proper operation or more frequently as indicated by pressure differential indicator readings or other indication of bag failure.
 - (iv) Routine observations at least once each day during daylight hours of baghouse operation shall be conducted to determine if there are visible emissions from the stack, leaks, noise, or other indications that corrective action is needed. If corrective action is necessary, it shall occur immediately.

(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.(E)(1).

(5) Reporting and Recordkeeping Requirements:

- (a) The permittee shall maintain records document the weight of grain received, in tons, through EU-1.1W for each calendar month and each period of twelve consecutive calendar months.
- (b) The permittee shall maintain records documenting the date, time, and pressure differential reading for each day the baghouse is in operation.
- (c) The permittee shall maintain filter replacement records including the date the filter replacement occurred and the type of filter installed.
- (d) The permittee shall maintain records documenting the date, time, observations and inspections, and corrective actions taken for each day the associated baghouse is in operation.

III.(F) Specific Conditions for Cooling Towers

- (1) Permitted Emission Points: The source is permitted to construct the emission points and associated emission units identified in the following table with the number of cooling tower cells and at the circulation rate listed:

Emission Point ID#	Required Control Equipment ID# and Description	Emission Unit ID# and Description	Number of Cooling Tower Cells	Maximum Circulation Rate (gal/hr)
EP-19	-	EU-19.1: C Cooling Tower	8	1,980,000

- (2) Emission Limitations and Testing Requirements:

- (a) The emissions limitations of Chapter 15, Section 001.01 applies to EP-19. (Chapter 15)
- (b) Testing shall be conducted to ensure compliance with the TDS limitation established and is discussed below. (Chapter 15)

- (3) Operational and Monitoring Requirements and Limitations:

- (a) The drift loss shall be limited to 0.00175, which shall be calculated as the weighted average of the drift losses for all cooling tower cells. Verification of drift loss shall be by manufacturer's guarantee. Manufacturer's drift loss guarantee shall be kept on site and readily available to Department representatives, upon request. (Chapter 3)
- (b) The total dissolved solids concentration (TDS) in the cooling water in Cooling Tower C (EU-19.1) shall not exceed 2,500 ppm for any single sampling event. A TDS sample shall be collected and tested at a minimum of once per calendar month. (Chapter 3)

- (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.(F)(1).

- (5) Reporting and Recordkeeping Requirements:

- (a) The permittee shall maintain records of the total dissolved solids concentration in the Cooling Tower C (EU-19.1) water. These records shall be compiled monthly by the 15th day of each month for the previous month.

III.(G) Specific Conditions for Equipment Leaks (EP-24)

(1) Permitted Emission Points:

Each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, flange, or other connector in VOC service and any device or system required by 40 CFR 60, Subparts VV or VVb located throughout the plant.

(2) Emission Limitations and Testing Requirements:

(a) Refer to 40 CFR Part 60 NSPS Subparts A, VV, and VVb for emission limitations and testing requirements that apply to equipment leaks (EP-24). (Chapter 12)

(3) Operational and Monitoring Requirements:

(a) Refer to 40 CFR 60, Subparts A, VV, and VVb for operational and monitoring requirements and limitations that apply to equipment leaks (EP-24). (Chapter 12)

(i) Emissions shall be controlled by the Leak Detection and Repair Program as defined in 40 CFR 60.482-1 through 60.482-10, 60.482-1a through 60.482-10a, or 60.482-1b through 60.482-10b as required.

(4) Applicable NSPS and NESHAP Standards:

The following standards apply to equipment leaks (EP-24):

Applicable Standard	Title	Rule Citation
NSPS Subpart A	General Provisions	Chapter 12, Sec. <u>001.01</u> 40 CFR 60.1
NSPS Subpart VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006	Chapter 12, Sec. <u>001.50</u> 40 CFR 60.480
NSPS Subpart VVb	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023	40 CFR 60.480b

(5) Reporting and Recordkeeping Requirements:

The owner or operator shall maintain the following:

(a) Reporting and recordkeeping required by 40 CFR Part 60 NSPS Subparts A, VV, and VVb.

III.(H) Specific Conditions for Storage Tanks

- (1) Permitted Emission Points: The source is permitted to construct the storage and process tanks identified in the following table at the capacities and for the storage of the products listed:

Emission Point ID#	Emission Unit ID#	Required Control Equipment Description	Emission Unit Description	Maximum Capacity
EP-30	EU-30 (T-2601)	-	200 Proof Storage Tank #3	907,200 gal
EP-37	EU-37.1	-	Gas Storage Tank	300 gal
EP-113	EU-113 (T-2602)	-	200 Proof Storage Tank #4	1,000,000 gal
EP-114	EU-114 (T-2603)	-	200 Proof Storage Tank #5	1,000,000 gal
EP-115	EU-115 (T-2604)	-	Day Tank #1	250,000 gal
EP-116	EU-28.1 (T-6101)	C-116: Vapor Collection System with Loadout Flare ^[1]	Day Tank #2, 200 Proof Storage Tank #1	250,000 gal
	EU-29.1 (T-6102)		Reprocess Tank, 200 Proof Storage Tank #2	250,000 gal
EP-117	EU-117 (T-2605)	-	Denaturant Tank	55,000 gal

^[1] Specific conditions for the Vapor Collection System with Loadout Flare (C-116) can be found in Condition III.(I).

- (2) Emission Limitations and Testing Requirements:

The source shall comply with all applicable emission limitations and testing requirements listed in 40 CFR Part 60 NSPS Subparts A, Kb, and Kc and 40 CFR Part 63 NESHAP Subparts A and CCCCCC that apply the units listed in Condition III.(H) above. (Chapter 12)

- (3) Operational and Monitoring Requirements and Limitations:

The source shall comply with all applicable operational and monitoring requirements listed in 40 CFR Part 60 NSPS Subparts A, Kb, and Kc and 40 CFR Part 63 NESHAP Subparts A and CCCCCC that apply the units listed in Condition III.(H) above. (Chapter 12)

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

- (a) The following NSPS Subparts apply to EU-30:

Applicable Standard	Title	Rule Citation
NSPS Subpart A	General Provisions	Chapter 12, Sec. <u>001.01</u> 40 CFR 60.1
NSPS Subpart Kb	Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 1984, and On or Before October 4, 2023	Chapter 12, Sec. <u>001.19</u> 40 CFR 60.110b

(b) The following NSPS Subparts apply to EU-113, EU-114, EU-115, and EU-117:

Applicable Standard	Title	Rule Citation
NSPS Subpart A	General Provisions	Chapter 12, Sec. <u>001.01</u> 40 CFR 60.1
NSPS Subpart Kc	Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023	40 CFR 60.110c

(c) The following NESHAP Subparts apply to EU-37.1:

Applicable Standard	Title	Rule Citation
NESHAP Subpart A	General Provisions	Chapter 13, Sec. <u>002.01</u> 40 CFR 63.1
NESHAP Subpart CCCCCC	Gasoline Dispensing Facilities	Chapter 13, Sec. <u>002.95</u> 40 CFR 63.11110

(5) Reporting and Recordkeeping Requirements:

The source shall comply with all applicable reporting and recordkeeping requirements listed in 40 CFR Part 60 NSPS Subparts A, Kb, and Kc and 40 CFR Part 63 NESHAP Subparts A and CCCCCC that apply the units listed in Condition III.(H) above.

III.(I) Specific Conditions for Ethanol Loadout

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

Emission Point ID#	Required Control Equipment ID# and Description	Emission Unit Description	Permitted Fuel Type
EP-116	C-116: Ethanol Vapor Recovery and Loadout Vapor Combustion Unit	EU-116.1: Ethanol Loadout Vapor Combustion Unit	Process Gas and Natural Gas
		EU-116.1: Truck Loading Skid	-
		EU-116.1: Rail Loading Skid #1	-
		EU-116.1: Rail Loading Skid #2	-
		EU-28.1 ^[1] : Day Tank #2	-
		EU-29.1 ^[1] : Reprocess Tank	-
EP-17 ^[2]	SP-61301: Flare with Vapor Recovery	EU-17.1 ^[2] : Truck and Rail Loadout	Process Gas and Natural Gas
		EU-28.1 ^[1] : Day Tank #2	-
		EU-29.1 ^[1] : Reprocess Tank	-
		T-6103: Denaturant Tank ^[2]	-

^[1] Specific Conditions for the Day Tank #2 and Reprocess Tank (EU-28.1 and EU-29.1) can be found in Specific Condition III.(H).

^[2] The existing Truck and Rail Loadout and Denaturant Tank (T-6103) will be decommissioned as a part of this project.

- (2) Emission Limitations and Testing Requirements:

At this time the NDWEE has not identified any emission limitations or testing requirements that apply to the emission points or emission units listed in Condition III.(I)(1).

- (3) Operational and Monitoring Requirements and Limitations:

- (a) Upon commissioning of any of the Ethanol Recovery and Loadout Vapor Combustion unit (EU-116.1), the existing Flare and Vapor Recovery unit (EP-17) shall be decommissioned within sixty (60) days. (Chapter 3)
- (b) The flare with vapor recovery unit (SP-61301) shall be in operation at all times the associated emission units are in operation, until the ethanol vapor recovery and loadout vapor combustion unit (C-116) is commissioned. (Chapter 3)
 - (i) The flare with vapor recovery unit shall be properly designed, installed, operated and maintained.
 - (ii) When emissions are routed through the flare, a flame shall be present at the vapor combustion unit. The facility must install an appropriate safety device or flame monitoring system to ensure that operations cannot occur without the presence of a flame. The safety device or flame monitoring system shall be properly installed, operated, calibrated and maintained.
 - (iii) Routine observations, at least once each day of operation, shall be conducted to determine whether there are visible emissions from the stack, leaks, noise, atypical operating parameters, or other indications that may necessitate corrective action. Corrective action shall be taken immediately, if necessary.

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- (c) When the ethanol vapor recovery and loadout vapor combustion unit (C-116) is commissioned, the unit shall be in operation at all times the associated emission units are in operation. (Chapter 3)
- (i) The ethanol vapor recovery and loadout vapor combustion unit shall be properly designed, installed, operated and maintained.
 - (ii) When emissions are routed through the vapor combustion unit, a flame shall be present at the vapor combustion unit. The facility must install an appropriate safety device or flame monitoring system to ensure that operations cannot occur without the presence of a flame. The safety device or flame monitoring system shall be properly installed, operated, calibrated and maintained.
 - (iii) Routine observations, at least once each day of operation, shall be conducted to determine whether there are visible emissions from the stack, leaks, noise, atypical operating parameters, or other indications that may necessitate corrective action. Corrective action shall be taken immediately, if necessary.
- (4) Applicable NSPS, NESHAP, and MACT Requirements:
- At this time the NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the emission points or emission units listed in Condition III.(I)(1).
- (5) Reporting and Recordkeeping Requirements:
- The permittee shall maintain the following:
- (a) Manufacturer's documentation for the safety device or flame monitoring system shall be kept on site and readily available to Department representatives.
 - (b) Operation and maintenance records for the ethanol vapor recovery and loadout vapor combustion unit (C-116) and safety device or flame monitoring system to demonstrate compliance with Condition III.(G)(3)(b), shall include the following:
 - (i) Records documenting when routine maintenance and preventive actions were conducted with a description of the maintenance and/or preventive action conducted.
 - (ii) Records documenting equipment failures, malfunctions, or other variations, including time of occurrence, remedial action taken, and when corrections were made.
 - (c) Within fifteen (15) business days after the ethanol vapor recovery and loadout vapor combustion unit (C-116) is commissioned, the source shall provide the NDWEE with written or electronic notice.
 - (d) Within fifteen (15) business days after flare with vapor recovery unit (SP-61301) is decommissioned, the source shall provide the NDWEE with written or electronic notice.
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III.(J) Specific Conditions for Haul Roads (EP-4W, EP-32)

(1) Permitted Emission Points:

- (a) All on-site haul roads with production-related truck traffic shall be paved. The paved haul roads shall comply with the following conditions. (Chapters 3 and 15)

(2) Emission Limitations and Testing Requirements:

- (a) Haul roads are subject to the requirements of Title 129, Chapter 15, Section 003. (Chapter 15)

(3) Operational and Monitoring Requirements and Limitations:

- (a) The owner or operator shall develop, maintain, and implement a Best Management Practices (BMP) plan to control emissions from haul roads to comply with Conditions I.(L). The effectiveness of the BMP to minimize emissions from haul roads will be demonstrated by compliance with Condition I.(L). (Chapters 3 and 15)
- (b) For each day of operation, the owner or operator shall conduct a survey of the plant property and haul roads to determine if visible fugitive emissions are being generated and leaving plant property. Implementation of fugitive dust control shall be taken upon observation of visible fugitive emissions leaving plant property or more frequently in accordance with the BMP plan. Documentation of all corrective actions and daily surveys shall be maintained in a log that shall accompany the BMP plan. (Chapter 3 and 15)

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

At this time, the NDWEE has not identified any NSPS, NESHAP, or MACT requirements that apply to the haul roads.

(5) Reporting and Recordkeeping Requirements:

The owner or operator shall maintain the following records:

- (a) Records documenting the use of fugitive dust control measures on haul roads.
- (b) Records of visible emission surveys taken daily during operation and a description of corrective action taken, if needed.

III.(K) Specific Conditions for Distillation Scrubber Operations

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

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description
EP-9 ^[1]	S-1501: Unit 1 Distillation Scrubber	EU-9.1: Unit 1 Beer Column
		EU-9.2: Unit 1 Rectifying Column
		EU-9.3: Unit 1 Molecular Sieve
EP-10 ^[1]	C-11533: Unit 2 Distillation Scrubber	EU-10.1: Unit 2 Beer Column
		EU-10.2: Unit 2 Rectifying Column
		EU-10.3: Unit 2 Stripper Column
		EU-10.4: Unit 2 Molecular Sieve
		EU-10.5: Unit 3 Alcohol Column
		EU-10.6: Unit 3 Molecular Sieve

^[1] Emission units associated with EP-9 and EP-10 are to be decommissioned with this project.

- (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. Performance testing, if required, shall be conducted in accordance with Condition I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Initial Performance Testing Required (Yes/No)
EP-9 EP-10	VOC	8.30 lb/hr ^{[1][2]}	Three 1-hour test runs or test method average	Chapter 3	No
	Acetaldehyde	2.15 lb/hr ^{[1][2]}	Three 1-hour test runs or test method average	Chapter 3	No

^[1] Combined emission limit with emission points EP-8-4, EP-9, EP-10, EP-13, EP-CC-03, and EP-CC-FUG.

^[2] The existing combined emissions limitations on EP-8-4, EP-9, EP-10, EP-13, EP-CC-03, and EP-CC-FUG will not be in affect after units associated with EP-9, EP-10, and EP-13 are decommissioned.

- (b) To demonstrate compliance with any combined limitation prescribed in Condition III.(K)(2)(a): (Chapters 3 and 15)
- (i) Performance testing shall be conducted concurrently for EP-8-4, EP-9, EP-10, and EP-13.
- (3) Operational and Monitoring Requirements and Limitations:
- (a) Operation and maintenance of scrubbers S-1501 and C-11533 shall be in accordance with the following requirements unless otherwise stated in an active Operating Permit. (Chapter 3)
- (i) S-1501 and C-11533 shall be operated and control emissions at all times when any of the associated emission units are in operation.
- (ii) S-1501 and C-11533 shall be equipped with devices that continuously monitor and record the following operating parameters in the manner described below; except as noted:

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1. Scrubbing liquid flow rate;
 2. Chemical addition flow rate, if utilized;
 3. Scrubber inlet pressure; and
 4. Scrubbing liquid temperature shall be continuously monitored and recorded once per day.
- (iii) When chemical addition is utilized, the total monthly amount of chemical, in gallons, added to S-1501 and C-11533 shall be monitored and recorded.
- (iv) Upon request by NDWEE personnel, chemical drawdown checks shall be performed to verify that the flow meter is working correctly.
- (v) The following operating parameters of S-1501 and C-11533 shall be maintained as described below:
1. Scrubber liquid shall be comprised of only well water to ensure consistent liquid temperature. In the event that the owner or operator uses an alternate scrubber liquid source, or scrubber liquid recirculation, compliance testing may be required to determine an appropriate scrubber liquid temperature and/or percent recirculation limit.
 2. The scrubbing liquid flow rate, flow rate of chemical additions, and concentration of the chemical injected into the scrubber shall be maintained at or above the levels recorded during testing. Chemical concentration, as documented by the supplier, shall be recorded upon use of the chemical.
- (vi) Observations at least once each day during daylight hours of scrubber operation shall be conducted to determine whether there are leaks, noise, or other indications that corrective action is necessary. If corrective action is necessary, it shall occur immediately.
- (vii) Flow meters for recording scrubbing liquid and chemical addition flow rates shall be maintained and calibrated according to manufacturer's instructions.
- (b) Upon commissioning of any of the Beer Degas (EU-8-15), Stripping Column (EU-8-16), Beer Columns #1 and #2 (EU-8-17 and EU-8-18), or Dehydration Membranes (EU-8-19), emission units associated with EP-9 and EP-10 shall be decommissioned within sixty (60) days. (Chapter 3)
- (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.(K)(1).
- (5) Reporting and Recordkeeping Requirements:
- The owner or operator shall maintain the following records:
- (a) Records that document the continuously monitored operating parameter data for S-1501 and C-11533, including the date and time of the readings, except as noted. The records shall include:
- (i) Scrubbing liquid flow rate;
 - (ii) Chemical addition flow rate;
 - (iii) Scrubber inlet pressure readings; and
-

- (iv) Daily scrubbing liquid temperature readings.
- (b) Monthly records that document the purchase date, concentration, amount, and type of chemical purchased for chemical injection associated with S-1501 and C-11533.
- (c) Records that document the operating parameters developed during the most recent valid performance test conducted at the facility.
- (d) Records that document the date and time of routine observations with a description, including operating parameters, atypical parameters observed, and any corrective actions taken, for each day S-1501 and C-11533 are in operation.
- (e) Records that document corrective action. Each corrective action shall be documented at time of occurrence, including the date, time, observations, and a description of the corrective action.
- (f) Records that document the date and time of routine maintenance and preventive actions performed and that include a description of the actions performed.
- (g) Within fifteen (15) business days after all emissions units listed in Condition III.(K)(1) are decommissioned, the source shall provide the NDWEE with written or electronic notice.

III.(L) Specific Conditions for DDGS Dryer and Scrubber Operations

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

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description
EP-13 ^[1]	C-11801: Dryer Scrubber	EU-13.1: A Dryer, Rotary Steam Disk, 100 ton/day (est.)
		EU-13.3: B Dryer, Rotary Steam Disk, 100 ton/day (est.)

^[1] Emission units associated with EP-13 are to be decommissioned with this project.

- (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. Performance testing, if required, shall be conducted in accordance with Condition I.(M) and II.(G).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Initial Performance Testing Required (Yes/No)
EP-13	VOC	8.30 lb/hr ^{[1][2]}	Three 1-hour test runs or test method average	Chapter 3	No
	Acetaldehyde	2.15 lb/hr ^{[1][2]}	Three 1-hour test runs or test method average	Chapter 3	No

^[1] Combined emission limit with emission points EP-8-4, EP-9, EP-10, EP-13, EP-CC-03, and EP-CC-FUG.

^[2] The existing combined emissions limitations on EP-8-4, EP-9, EP-10, EP-13, EP-CC-03, and EP-CC-FUG will not be in affect after units associated with EP-9, EP-10, and EP-13 are decommissioned.

- (b) To demonstrate compliance with any combined limitation prescribed in Condition III.(L)(2)(a): (Chapters 3 and 15)
- (i) Performance testing shall be conducted concurrently for EP-8-4, EP-9, EP-10, and EP-13.
- (3) Operational and Monitoring Requirements and Limitations:
- (a) Operation and maintenance of scrubber C-11801 shall be in accordance with the following requirements unless otherwise stated in an active Operating Permit. (Chapter 3)
- (i) C-11801 shall be operated and control emissions at all times when any of the associated emission units are in operation.
- (ii) C-11801 shall be equipped with devices that continuously monitor and record the following operating parameters, except as noted::
1. Scrubbing liquid flow rate;
 2. Recirculation liquid flow rate;
 3. Chemical addition flow rate, if utilized;
 4. Scrubber inlet pressure; and
 5. Recirculation liquid inlet temperature.

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- (iii) When chemical addition is utilized, the total monthly amount of chemical, in gallons, added to C-11801 shall be monitored and recorded.
 - (iv) Upon request by NDWEE personnel, chemical drawdown checks shall be performed to verify that the flow meter is working correctly.
 - (v) The following operating parameters of C-11801 shall be maintained as described below:
 - 1. The recirculation liquid temperature shall be maintained at or below the tested level(s) recorded during the most recent valid performance test under normal operating conditions.
 - 2. The scrubbing liquid flow rate, recirculation liquid flow rate, flow rate of chemical additions, and concentration of the chemical injected into the scrubber shall be maintained at or above the levels recorded during testing. Chemical concentration, as documented by the supplier, shall be recorded upon use of the chemical.
 - (vi) Observations at least once each day during daylight hours of scrubber operation shall be conducted to determine whether there are leaks, noise, or other indications that corrective action is necessary. If corrective action is necessary, it shall occur immediately.
 - (vii) Flow meters for recording scrubbing liquid, recirculation liquid, and chemical addition flow rates shall be maintained and calibrated according to manufacturer's instructions.
 - (b) Upon commissioning of any of the DDGS Dryer TO/HSRG units (EU-102 and EU-103) or Dryer Cooler units (EU-104 and EU-105), emission units associated with EP-13 shall be decommissioned within sixty (60) days. (Chapter 3)
 - (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.(L)(1).
 - (5) Reporting and Recordkeeping Requirements:

The owner or operator shall maintain the following records:

 - (a) Records that document the continuously monitored operating parameter data for C-11801, including the date and time of the readings. The records shall include:
 - (i) Scrubbing liquid flow rate;
 - (ii) Recirculation liquid flow rate;
 - (ii) Chemical addition flow rate;
 - (iii) Scrubber inlet pressure readings; and
 - (iv) Recirculation liquid inlet temperature readings.
 - (b) Monthly records that document the purchase date, concentration, amount, and type of chemical purchased for chemical injection associated with C-11801.
 - (c) Records that document the operating parameters developed during the most recent valid performance test conducted at the facility.
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- (d) Records that document the date and time of routine observations with a description, including operating parameters, atypical parameters observed, and any corrective actions taken, for each day C-11801 is in operation.
- (e) Records that document corrective action. Each corrective action shall be documented at time of occurrence, including the date, time, observations, and a description of the corrective action.
- (f) Records that document the date and time of routine maintenance and preventive actions performed and that include a description of the actions performed.
- (g) Within fifteen (15) business days after all emissions units listed in Condition III.(L)(1) are decommissioned, the source shall provide the NDWEE with written or electronic notice.