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84069
AIR 155 00052

AIR QUALITY CLASS II OPERATING PERMIT

PERMIT NUMBER: OP16S2-001

NDEQ ID: 84069

Program ID: AIR 155 00052

Permit Issued To: AltEn, LLC

Name of Source in Application: AltEn, LLC

Mailing Address: 1344 County Road 10, Mead, Nebraska, 68041

Source Location: 1344 County Road 10, Mead, Saunders County, Nebraska

Project Description: This Operating Permit approves the operation of a fuel ethanol manufacturing facility producing approximately 24.1 million gallons of denatured ethanol annually.

Standard Industrial Classification (SIC) Code(s): 2869 (Manufacturing Industrial Organic Chemicals)

Pursuant to Title 129, Chapter 14, of the Nebraska Air Quality Regulations, the public has been notified by prominent advertisement of the proposed operation of an air contaminant source and the thirty (30) day period allowed for comments has elapsed. This Operating Permit approves the operation of a fuel ethanol manufacturing facility. This Operating Permit approves the operation of this source as identified in the Air Quality Operating Permit Application #16S2-001 received January 7, 2016, including any supporting information received prior to issuance of this permit. Additional details on the source, including estimated pollutant emissions, 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. Unless otherwise noted, the conditions of this permit are enforceable by the United States Environmental Protection Agency (USEPA) and the Nebraska Department of Environmental Quality (NDEQ). The permit holder, owner, and operator of the source shall assure compliance with all of the terms and conditions in this permit and the Attachments.

The undersigned issues this document on behalf of the Director in accordance with Title 129 – Nebraska Air Quality Regulations.

Date May 23, 2019

Kevin Stoner
Kevin Stoner, Air Administrator
Air Quality Division

Jim Macy, Director

Department of Environmental Quality

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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	NO ₂	Hazardous Air Pollutants
BACT	Best Available Control Technology	NO _x	Nitrogen Dioxide
Btu	British Thermal Unit	N ₂ O	Nitrogen Oxides
bu	Bushel	NSPS	Nitrous Oxides
CAA	Clean Air Act	NSR	New Source Performance Standard
CE	Control Equipment	OP	New Source Review
cf	Cubic feet	PAL	Operating Permit
CEMS	Continuous Emissions Monitoring System	PEMS	Plant-wide Applicability Limit
CFC	Chlorofluorocarbons	Pb	Predictive Emissions Monitoring System
CFR	Code of Federal Regulations	PM	Lead (chemical abbreviation)
CO	Carbon Monoxide	PM _{2.5}	Particulate Matter
CO ₂	Carbon Dioxide		Particulate Matter with an aerodynamic diameter equal to or less than 2.5 microns
CO ₂ e	Carbon Dioxide Equivalent	PM ₁₀	Particulate Matter with an aerodynamic diameter equal to or less than 10 microns
CP	Construction Permit	PM ₁₀ (total)	Particulate Matter with an aerodynamic diameter equal to or less than 10 microns
Director	Director of the NDEQ	ppb	Filterable and condensable particulate matter
dscf	Dry Standard Cubic Feet	ppm	Parts per Billion
dscfm	Dry Standard Cubic Feet per Minute	ppmv	Parts per Million
EMIS	Emergency Management Information System	ppmvd	Parts per Million by Volume
EQC	Environmental Quality Council	PSD	Parts per Million by Volume, Dry Basis
EP	Emission Point	PTE	Prevention of Significant Deterioration
EU	Emission Unit	scf	Potential to Emit
FIP	Federal Implementation Plan	SIC	Standard Cubic Feet
FR	Federal Register	SIP	Standard Industrial Classification
ft	Feet	SO ₂	State Implementation Plan
FTIR	Fourier Transform Infrared	SO _x	Sulfur Dioxide
GHGs	Greenhouse Gases	TDS	Sulfur Oxides
HAP	Hazardous Air Pollutant(s)	Title 129	Total Dissolved Solids
hp	Horsepower		Title 129, Nebraska Air Quality Regulations
hr	Hour	tpy	Tons per year
lb	Pound	TRS	Total Reduced Sulfur
LDAR	Leak Detection and Repair	TSP	Total Suspended Particulate Matter
LNB	Low NO _x Burner	USEPA	United States Environmental Protection Agency
MACT	Maximum Achievable Control Technology	UTM	Universal Transverse Mercator
Mgal	One Thousand Gallons	VHAP	Volatile Hazardous Air Pollutant
MMBtu	One Million British Thermal Units	VMT	Vehicle Miles Traveled
MMgal	One Million Gallons	VOC	Volatile Organic Compound
MMscf	One Million Standard Cubic Feet	yr	Year
MSDS	Material Safety Data Sheet		
n/a	Not Applicable		
NAAQS	National Ambient Air Quality Standards		
NDEQ	Nebraska Department of Environmental Quality		
NESHAP	National Emission Standards for		

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 amended July 15, 2018.

(B) The permittee shall allow the NDEQ, USEPA or an authorized representative, upon presentation of credentials (Neb. Rev. Statute §81-1504; Title 129, Chapter 8, Section 012.02) to:

- (1) Enter upon the permittee'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 15.

(D) This permit may be revoked for cause, including but not limited to (Title 129, Chapter 15, Section 006.02):

- (1) The existence at the source of unresolved noncompliance with applicable requirements or a term or condition of this permit, and refusal of the permittee to agree to an enforceable schedule of compliance to resolve the noncompliance;
- (2) The submittal by the permittee of false, incomplete, or misleading information to the NDEQ or USEPA;
- (3) A determination by the Director that the permitted source or activity endangers human health or the environment and that the danger cannot be removed by a revision of this permit; or
- (4) The failure of the permittee to pay a penalty owed pursuant to court order, stipulation and agreement, or order issued by the Administrator of the USEPA.

(E) The following methods may be used to determine compliance with the terms and conditions in this permit (Title 129, Chapter 34, Section 008):

- (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, Chapter 17, 19, or 27;
- (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.(E)(1) through (3).
- (F) Application for review of plans or advice furnished by the Director will not relieve the permittee 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 37).
- (G) If and when the Director declares an air pollution episode as defined in Title 129, Chapter 38, Sections 003.01B, 003.01C, or 003.01D, the permittee shall immediately take all required actions listed in Title 129, Appendix I, Paragraph 1.1, 1.2, and 1.3, respectively, until the Director declares the air pollution episode terminated (Title 129, Chapter 38, Section 003).
- (H) Recordkeeping: To ensure compliance with this permit, records shall be maintained as outlined below. Records include, but are not limited to: 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 34, Section 006; Chapter 8, Section 004.02B):
 - (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 NDEQ 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.
 - (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 6, Sections 002 and 005; Chapter 11; and Chapter 35, Sections 002, 004 and 005):
 - (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 11, Section 001; Chapter 34, Section 006; and Chapter 35, Sections 006.02 and 006.05).
 - (5) All records of opacity readings, instrument readings, visual equipment inspections, log book 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.
- (I) All permitted emission units, associated emissions conveyances, required control equipment, and required monitoring equipment shall be properly installed, operated, and maintained (Title 129, Chapter 34, Section 006; Chapter 17; Chapter 8, Sections 002 and 015).
 - (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 pollutants 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.
- (J) In the event of any discrepancies between applicable federal air standards and the terms and conditions of this permit, the source must meet the most stringent.
- (K) Open fires are prohibited except as allowed by Title 129, Chapter 30.
- (L) Particulate Matter – General Requirements (Title 129, Chapter 32):
 - (1) The permittee 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 permittee 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 NDEQ shall be completed as follows:
 - (a) The permittee shall provide the NDEQ at least thirty (30) days written notice prior to testing to afford the NDEQ an opportunity to have an observer present. The NDEQ 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 34, Section 003).
 - (b) The notification required by Condition I.(M)(1)(a) shall include the following (Title 129, Chapter 34, Section 003):
 - (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 34, Section 002, or other NDEQ approved methodologies (Title 129, Chapter 34, Section 002).
- (d) Performance tests shall be conducted under operating conditions that are most likely to challenge the emissions control measures of the facility. Typically this would be at the maximum safe operating capacity unless otherwise specified by the NDEQ (Title 129, Chapter 34, Section 007).
- (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 NDEQ.
- (f) The permittee 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 NDEQ 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 34, Section 002.07):
 - (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.
- (N) 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 NDEQ within fifteen (15) days after such change. The NDEQ 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 34, Section 001).
- (1) This notification requirement applies to emissions units and/or control equipment that meet

the following requirements, except as provided in Condition I.(N)(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 permittee shall make a one-time notification to the NDEQ within fifteen (15) days of when there is a ten (10) percent 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 ten (10) percent increases over the rate most recently notified to the NDEQ, the permittee shall make a one-time notification to the NDEQ 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 Conditions I.(N)(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 NDEQ 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 notification requirements above do not apply when compliance with the emission limitation is demonstrated through the use of a CEMS, PEMS or COMS.
- (O) 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 20, Section 005 (Title 129, Chapter 20, Sections 004 and 006).

II. GENERAL OPERATING PERMIT CONDITIONS

The following General Conditions apply to this permit unless otherwise provided for in the Specific Conditions of this permit. Terms and conditions of this permit are in accordance with the requirements of Title 129, Chapter 8, Sections 001 and 015. The applicable requirement is listed with each permit condition.

(A) Submittals/Reporting:

All submittals, including reports, required by Condition II.(A) and Condition I.(N)(1)(g) shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and the belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete (Title 129, Chapter 1, Section 135; Chapter 7, Section 008; and Chapter 8, Sections 012.01 and 015).

The permittee shall submit reports to the NDEQ as follows:

- (1) The permittee shall submit a report of applicable monitoring and all instances of deviations from permit requirements every twelve (12) calendar months to the NDEQ. The report shall be submitted by March 31 of the following year (Title 129, Chapter 8, Sections 004.03A and 015).
- (2) The permittee shall report all deviations from permit requirements, including those attributable to start-ups, shutdowns or malfunctions, the probable cause of such deviations, and any corrective actions or preventive measures taken. All reports of deviations must be submitted within the time frame as per Conditions II.(A)(2)(a), (b), and (c) below (Title 129, Chapter 11, Chapter 8, Sections 004.03, 004.04, 015 and Chapter 35, Sections 004 and 005).
 - (a) Any deviation resulting from emergency or upset conditions shall be reported within two (2) working days of the date on which the permittee first becomes aware of the deviation if the permittee wishes to assert the affirmative defense authorized under Chapter 11 of Title 129. The report may be submitted initially without a certification by the responsible official, as required by Condition II.(A) above, if an appropriate certification is provided within ten (10) days thereafter, together with the information required under Condition II.(A)(3) and any corrected or supplemental information required concerning the deviation.
 - (b) Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported as soon as is practicable. The report may be submitted initially without a certification by a responsible official in accordance with Condition II.(A) above, if an appropriate certification is provided within ten (10) days thereafter, together with any corrected or supplemental information required concerning the deviation.
 - (c) All other deviations shall be reported as per Condition II.(A)(1).
- (3) The permittee shall submit completed emission inventory forms for the preceding calendar year to the NDEQ by March 31 of each year (Title 129, Chapter 6).
- (4) Certification of compliance with the terms and conditions of this permit, including emission limitations, standards, or work practices, for the preceding calendar year, shall be submitted to the NDEQ by March 31 of each year. The report shall be certified by a responsible official in accordance with Condition II.(A) and shall include the following (Title 129, Chapter 8, Sections 012.05 and 015.03).
 - (a) The identification of each term or condition of the permit that is the basis of the certification;

- (b) The compliance status;
 - (c) A determination of whether compliance was continuous or intermittent; and
 - (d) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (5) Any emissions due to malfunctions, unplanned shutdowns, and ensuing start-ups that are, or may be in excess of applicable emission limitations shall be reported to the NDEQ in accordance with Condition II.(A)(2)(a).
- (B) This permit is issued for a fixed term of five (5) years. A timely renewal application is one that is submitted to the NDEQ a minimum of six (6) months and a maximum of eighteen (18) months before permit expiration. Provided a timely and complete renewal application has been submitted, the conditions of this permit shall continue until the effective date of a new permit. (Title 129, Chapter 8, Section 003 and Chapter 7, Section 002.06)
- (C) The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Nebraska Environmental Protection Act and/or the Federal Clean Air Act, and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application (Title 129, Chapter 8, Sections 007.01 and 015).
- (D) It shall not be a defense for a permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit (Title 129, Chapter 8, Sections 007.02 and 015).
- (E) This permit may be modified; revoked, reopened, and reissued; or terminated for cause in accordance with Title 129 and Title 115, Rules of Practice and Procedure. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not supersede any permit condition (Title 129, Chapter 8, Sections 007.03 and 015).
- (F) Conditions under which this permit will be reopened, revoked and reissued or terminated during its term for cause, include but are not limited to (Title 129, Chapter 15, Section 006.01 and Chapter 8, Sections 010 and 015):
- (1) Additional applicable requirements under the Nebraska Environmental Protection Act or the Federal Clean Air Act, which become applicable to this source with a remaining permit term of three (3) or more years. No such reopening will occur if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended;
 - (2) Additional requirements, including excess emissions requirements, that become applicable to an affected source under the acid rain program under Chapter 26;
 - (3) A determination by the Director or the Administrator of USEPA that:
 - (a) The permit must be revoked and reissued to assure compliance with the applicable requirements;
 - (b) The permit contains a material mistake or that inaccurate statements were made in the emissions standards or other terms or conditions of the permit;
 - (c) An applicable requirement or applicable requirement under the Federal Clean Air Act applies which was not identified by the permittee in its application.
- (G) This permit does not convey any property rights of any sort, or any exclusive privilege (Title 129,

Chapter 8, Sections 007.04 and 015).

- (H) The permittee shall furnish to the NDEQ, within the time specified by the NDEQ, any information requested by the NDEQ in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the NDEQ copies of records required to be kept in accordance with the permit or, for information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality pursuant to Title 115 - Rules of Practice and Procedure (Title 129, Chapter 8, Sections 007.05 and 015).
- (I) The provisions of this permit supersede the provisions of any previously issued operating or construction permit. The applicable requirements of previously issued construction permits are now conditions of this permit (Title 129, Chapter 8, Sections 002 and 007.06 and 015).
- (J) In the event of a challenge to any portions of this permit, the unchallenged permit requirements shall remain valid (Title 129, Chapter 8, Section 006).
- (K) Changes allowed without an operating permit revision (Title 129, Chapter 15, Section 007):
 - (1) The permittee may make the changes identified in Condition II.(K)(1)(a) within a permitted facility without a permit revision if the change is not a modification under Title 129, Chapters 18, 23, 27, or 28; the change does not require a construction permit under Chapters 17 or 19; and the change does not result in the emissions allowable under the permit (whether expressed therein as a rate of emissions or in the terms of total emissions) being exceeded (Title 129, Chapter 15, Section 007.01).
 - (a) Changes in the configuration of the facility's equipment, defined as "Section 502(b)(10) changes", as defined in Title 129, Chapter 1, Section 139 (Title 129, Chapter 15, Section 007.01A). Written notification of these changes shall be sent to the NDEQ as follows:
 - (i) Non-Emergencies (Title 129, Chapter 1, Section 139; Chapter 15, Section 007.01):
 1. Written notification shall be received by the NDEQ a minimum of seven (7) days in advance of the proposed changes;
 - (ii) Emergencies (Title 129, Chapter 1, Section 139; Chapter 15, Section 007.01):
 1. Initial notification shall be made within two working days of the date on which the permittee first becomes aware of the need for the change;
 2. A follow-up written notification shall be submitted as soon as practicable; and,
 3. The notifications shall include an explanation of the nature of the emergency.
 - (iii) Required information (Title 129, Chapter 15, Section 007.01A):
 1. A brief description of the change within the permitted source (Chapter 15, Section 007.01A1);
 2. The date on which the change will occur (Chapter 15, Section 007.01A2);
 3. Any change in emissions (Chapter 15, Section 007.01A3); and,
 4. Any permit term or condition that is no longer applicable as a result of the change (Chapter 15, Section 007.01A4).
 - (iv) A copy of the notification shall be attached to the source's copy of the operating permit.
 - (2) The permittee may make changes that are not defined as "Section 502(b)(10) changes" within

- a permitted facility without a permit revision if the change is not a modification under Title 129, Chapters 18, 23, 27, or 28; and the change is not a change which would require a construction permit under Chapters 17 or 19 (Title 129, Chapter 15, Section 007.02).
- (a) Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition (Title 129, Chapter 15, Section 007.02A).
 - (b) The source shall provide contemporaneous written notice to the Director, except for changes that qualify as insignificant activities under the provisions of Title 129, Chapter 7, Sections 006.03 and 006.04. Such written notice shall include (Title 129, Chapter 15, Section 007.02B):
 - (i) A description of each change;
 - (ii) The date the change will be made;
 - (iii) A description of any change in emissions;
 - (iv) A list of the pollutants emitted; and,
 - (v) A list of any applicable requirements that would apply as a result of the change, including terms and conditions established in the relevant operating permit for synthetic minor purposes.
 - (c) A copy of the notification in Condition II.(K)(2)(b) shall be attached to the source's copy of the operating permit.
 - (d) The permittee shall keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and emissions resulting from those changes (Title 129, Chapter 15, Section 007.02D).
 - (e) Upon review of a notice submitted in accordance with Condition II.(K)(2)(b), the NDEQ may require a source to apply for an operating permit if the change does not meet the requirements of Condition II.(K)(2) (Title 129, Chapter 15, Section 007.02E).
- (3) Testing requirements:
- (a) Testing may be required if a change reported under Condition II.(K)(1) or II.(K)(2) involves an emissions unit that was previously tested (Title 129, Chapter 8, Sections 004.01B and 015; Chapter 34).
- (L) The source shall comply with the requirements of 40 CFR Part 68, Chemical Accident Prevention Provisions, Risk Management Plan (RMP). Where applicable, as part of the compliance certification submitted under Condition II.(A)(4), the permittee shall submit a certification statement that the source is in compliance with all requirements of Part 68, including the registration and submission of the RMP (40 CFR 68.215(a); Title 129, Chapter 8, Section 011).

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

Potential to emit (PTE) air quality pollutants for a stationary source must be calculated with the source operating continuously 24 hours per day, 365 days per year at maximum capacity under its physical and operational design (emission factor times 8,760 hours per year), unless otherwise limited in a federally enforceable permit or rule.

(A) Specific Conditions for Grain Handling and Milling

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-1	CE-01: Grain Unloading Baghouse; Installed 2006	EU-01: Grain Receiving Station; Maximum Capacity: 2,725 bu/hr; Installed in 2006	None
		EU-03: Elevator Leg; Maximum Capacity: 10,000 bu/hr; Installed in 2006	
		EU-04: Grain Storage Silos; Maximum Capacity: 20,000 bu/hr; Installed in 2006	
EP-2	CE-02: Scalper/Day Tank Baghouse; Installed in 2006	EU-09: Scalper; Maximum Capacity: 1,975 bu/hr; Installed in 2006	None
		EU-11: Day Tank; Maximum Capacity: 6,000 bushels; Installed in 2006	
EP-3	CE-03: Hammermill Baghouse; Installed in 2006	EU-13: Hammermill; Maximum Capacity: 1,975 bu/hr; Installed in 2006	None
		EU-14: Conveyor; Maximum Capacity: 1,205 bu/hr; Installed in 2006	
EP-16	None	EU-16: Grain Handling Fugitives; Maximum Capacity: 10,000 bu/hr	None
-	None	Flat Grain Storage Area; Dimensions: 456' x 135'; Total Storage Capacity: 1,000,000 bushels	None

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(A)(1).

(3) Emission Limitations and Testing Requirements:

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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-1	PM ₁₀	0.62 lbs/hr	1-hour	Construction	No

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
				Permit, CP13-010, Condition III.(A)(2)(a), issued February 20, 2014; Title 129, Chapters 4 and 19	
EP-1	PM (filterable)	37.46 lbs/hr ^[1]	Three 1-hour test runs or test method average	Construction Permit, CP13-010, Condition II.(G), issued February 20, 2014; Title 129, Chapter 20, Section 001	No
EP-2	PM (filterable)	37.46 lbs/hr ^[1]	Three 1-hour test runs or test method average	Construction Permit, CP13-010, Condition II.(G), issued February 20, 2014; Title 129, Chapter 20, Section 001	No
EP-3	PM ₁₀	0.19 lbs/hr	1-hour	Construction Permit, CP13-010, Condition III.(A)(2)(a), issued February 20, 2014; Title 129, Chapters 4 and 19	No
EP-3	PM (filterable)	37.46 lbs/hr ^[1]	Three 1-hour test runs or test method average	Construction Permit, CP13-010, Condition II.(G), issued February 20, 2014; Title 129, Chapter 20, Section 001	No
EP-1, EP-2 and EP-3	Opacity	< 20 percent ^[2] for each emission point	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1] Compliance with this PM limitation demonstrates compliance with the Title 129, Chapter 20, Section 001 PM limitations.

^[2] Compliance with Condition III.(A)(4)(c) demonstrates compliance with the Opacity limitation.

(4) Operational and Monitoring Requirements:

- (a) Emissions from the emission units EU-01, EU-03 and EU-04 shall be controlled by pollution control equipment CE-01; emissions from the emission units EU-09 and EU-11 shall be controlled by pollution control equipment CE-02; and emissions from the emission units EU-13 and EU-14 shall be controlled by pollution control equipment CE-

03 [Construction Permit, CP13-010, Condition III.(A)(3)(a), Issued February 20, 2014; Title 129, Chapters 4 and 20].

- (b) Operation and maintenance of each baghouse (CE-01, CE-02, and CE-03) shall be in accordance with the following requirements: [Construction Permit, CP13-010, Condition III.(A)(3)(b), Issued February 20, 2014; Title 129, Chapters 4, 20 and 34].
 - (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 indicator readings shall be recorded at least once each day that the associated 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) Observations at least once each day during daylight hours of baghouse operation shall be conducted to determine whether there are visible emissions from the stack, leaks, noise, or other indications that corrective action is needed. If corrective action is required, it shall occur immediately.
 - (v) The owner or operator shall maintain an on-site inventory of spare bags of each type used to ensure rapid replacement in the event of bag failure.
 - (vi) Collected waste material from each baghouse shall be handled, transported, and stored in a manner that ensures compliance with Condition I.(L) [Title 129, Chapter 8, Section 004].
- (c) A source representative shall conduct visible emissions survey for each emission point, EP-1, EP-2 and EP-3, on a daily basis. These surveys shall be conducted during daylight hours while each emission unit is operating under normal conditions [Title 129, Chapter 8, Sections 004.01B and 015; Chapter 20, Section 004].
 - (i) For deviation reporting purposes, visible emissions (excluding water vapor) from any emission point shall be considered a deviation and shall be reported in accordance with Condition II.(A)(2).

(5) Recordkeeping and Reporting Requirements:

- (a) Inspection and maintenance records for each fabric dust collector (CE-01, CE-02 and CE-03), to show compliance with Condition III.(A)(4)(b), shall include the following:
 - (i) The permittee shall keep records documenting when routine observations were conducted with a description, including operating parameters (e.g., pressure differential readings) and any atypical observations. The records shall include the operating ranges for each operating parameter [Construction Permit, CP13-010, Condition III.(A)(5)(a), Issued February 20, 2014].
 - (ii) The permittee shall keep records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action performed [Construction Permit, CP13-010, Condition III.(A)(5)(b), Issued February 20, 2014].
 - (iii) Filter replacement records including filter position, type, and date of filter installation [Construction Permit, CP13-010, Condition III.(A)(5)(c), Issued February 20, 2014].

- (iv) The permittee shall keep records documenting equipment failures, malfunctions, or other variations, including time of occurrence, remedial action taken, and when corrections were made [Construction Permit, CP13-010, Condition III.(A)(5)(d), Issued February 20, 2014].
- (b) The results of each visible emissions survey for each emission point (EP-1, EP-2 and EP-3) shall be recorded in a log, which shall include, at a minimum, the following items [Title 129, Chapter 8, Section 015.03]:
 - (i) The emission points included in the survey.
 - (ii) All emission points from which visible emissions occurred (except for water vapor).
 - (iii) Emission points for which the emission units were not in operation during the survey.
 - (iv) Each entry shall be dated and initialed by the person taking the opacity readings.

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(B) Specific Conditions for Fermentation and Distillation Operations

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-6	CE-06: Fermentation and Distillation Scrubber (CO ₂ Scrubber with chemical addition); Installed in 2006	EU-29a: Fermenter #1; Maximum Capacity: 376,200 gallons	None
		EU-29b: Fermenter #2; Maximum Capacity: 376,200 gallons	
		EU-29c: Fermenter #3; Maximum Capacity: 376,200 gallons	
		EU-29d: Fermenter #4; Maximum Capacity: 376,200 gallons	
		EU-44: Beer Well; Maximum Capacity: 538,000 gallons	
		EU-23: Liquefaction Tank; Maximum Capacity: 29,273 gallons	
		EU-37: Yeast Slurry Tank; Maximum Capacity: 18,600 gallons	
		EU-73: Stillage Tank #1; Maximum Capacity: 141,700 gallons	
		EU-77: Stillage Tank #2; Maximum Capacity: 141,700 gallons	
		EU-48: Beer Stripper	
		EU-58: Rectifier	

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(B)(1).

(3) Emission Limitations and Testing Requirements:

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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-6	VOC	12.0 lbs/hr	Three 1-hour test runs or test method average	Construction Permit, CP14-066, Condition III.(B)(2)(a), Issued October 9, 2015; Title 129, Chapter 17	Yes ^[3]
	Acetaldehyde	2.17 lbs/hr	Three 1-hour test runs or test method average	Construction Permit, CP14-066, Condition III.(B)(2)(a), Issued October 9, 2015; Title 129, Chapter 17	Yes ^[3]
	HAP	-	Speciation and Quantification of HAP composition at outlet	Construction Permit, CP14-066, Condition III.(B)(2)(a), Issued October 9, 2015; Title 129, Chapters 27 and 28	Yes ^[3]
	PM (filterable)	16.87 lb/hr ^{[1],[2]}	Three 1-hour test runs or test method average	Title 129, Chapter 20, Section 001	No
	Opacity	< 20 Percent ^[4]	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1] Compliance with this PM limitation demonstrates compliance with the Title 129, Chapter 20, Section 001 PM limitations.

^[2] The process weight rate limitation in this table is based on the maximum design throughput of the emission unit. The process weight rate limit will vary with the actual throughput in accordance with Title 129, Chapter 20, Table 20-2.

^[3] See Condition III.(B)(4)(c) for specific testing requirements. Performance testing requirements do not apply when compliance with the emission limitation is demonstrated through the use of a CEMS or PEMS.

^[4] Compliance with Condition III.(B)(4)(g) demonstrates compliance with the Opacity limitations.

(4) Operational and Monitoring Requirements:

- (a) Emissions from the emission units, EU-29a, EU-29b, EU-29c, EU-29d, EU-44, EU-23, EU-37, EU-73, EU-77, EU-48, and EU-58 shall be controlled by pollution control equipment CE-06 (EP-6) as specified in Condition III.(B)(1) [Construction Permit, CP14-066, Condition III.(B)(3)(a), Issued October 9, 2015; Title 129, Chapters 19 and 27].
- (b) Operation and maintenance of the fermentation and distillation scrubber (CE-06) shall be

in accordance with the following requirements [Construction Permit, CP14-066, Condition III.(B)(3)(b), Issued October 9, 2015; Title 129, Chapters 17 and 27]:

- (i) The scrubber shall be operated and be controlling emissions at all times when the associated emission units are in operation.
 - (ii) The scrubber shall be properly designed, installed, operated and maintained. The manufacturer's operation and maintenance manual, or its equivalent, detailing proper operation, inspection and maintenance of the scrubber shall be kept on site and readily available to NDEQ representatives.
 - (iii) The scrubber shall be equipped with devices capable of monitoring the following operating parameters in the manner described below.
 - 1. Scrubbing liquid flow rate shall be monitored and recorded continuously by Distributed Control System (DCS);
 - 2. Chemical addition flow rate shall be monitored and recorded continuously if chemical addition is utilized, by DCS;
 - 3. Scrubber pressure differential shall be monitored and recorded continuously by DCS; and,
 - 4. Scrubber liquid temperature shall be monitored by direct measurement and recorded at least once each day.
 - (iv) If chemical addition is utilized the total monthly amount of chemical, in gallons, added to the scrubber shall be monitored and recorded by the permittee.
 - (v) Chemical draw down checks shall be performed upon request by NDEQ personnel to verify that the flow meter is working correctly.
 - (vi) The scrubber operating parameters shall be maintained at the levels recorded during the most recent valid performance test conducted at the facility.
 - (vii) 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.
 - (viii) Flow meters for recording scrubbing liquid and chemical addition flow rates shall be maintained and calibrated according to manufacturer's instructions.
- (c) In order to demonstrate compliance with the VOC and HAP limitations in Condition III.(B)(3), the permittee shall obtain pounds per hour (lb/hr) emission factors for individual HAPs, total HAPs, and VOCs by conducting performance testing on the Fermentation and Distillation scrubber (CE-06). The performance testing shall be as described below [Title 129, Chapter 8, Sections 004.01 and 015.03 and Chapter 34]:
- (i) The permittee shall notify the NDEQ if the feedstock or feedstock percentages deviates over 5% based on the last valid performance test, five (5) days before the change(s) occur. [Title 129, Chapter 8, Section 015.03]
 - (ii) By March 15th of each year, the source shall calculate the rolling 12-month total combined emissions of the largest single HAP from the Fermentation and Distillation Scrubber (CE-06).

1. To calculate the rolling 12-month HAP emissions from the Fermentation and Distillation Scrubber (CE-06), the source shall use the emission factors obtained from the testing as required in Condition III.(B)(3) and III.(B)(4)(c)(iii) below.
2. The source shall use the following calculation methodology to calculate the combined monthly largest single HAP emissions from the Fermentation and Distillation Scrubber (CE-06).

$$E_T = [CHE_P] \times (OH_P) / (2,000 \text{ lbs/ton})$$

Where:

E_T = Total combined controlled emissions (tons/month)

CHE_P = Controlled emissions from Fermentation and Distillation Scrubber (lbs/hr)

OH_P = Operating hours of Fermentation and Distillation Scrubber (hrs/month)

3. The source shall submit to the NDEQ its rolling 12-month (from March 1 of the previous year through the last day of February of the current year) total combined emissions of largest single HAP from Process Scrubber (CE-06), including supporting calculations. The source shall establish a testing tier for Fermentation and Distillation Scrubber (CE-06) in accordance with the testing tier table below.

Tier	Rolling 12-Month Total Emissions of Largest Single HAP	Testing Frequency
1	≥ 0 tons per year and < 5 tons per year	Annual
2	≥ 5 tons per year and < 8 tons per year	Semi-Annual
3	≥ 8 tons per year	Quarterly

4. Upon issuance of this permit, the initial testing frequency for the Fermentation and Distillation Scrubber. (CE-06) shall be in accordance with Tier 1 prescribed in the Testing Tier Table in Condition III.(B)(4)(c)(ii)3.
 5. The information required in Condition III.(B)(4)(c)(ii)3. shall be submitted to NDEQ by March 31 of each calendar year.
 6. The information submittal required in Condition III.(B)(4)(c)(ii)3. shall be considered a separate requirement and shall be submitted separately from the annual air emissions inventory required by Condition II.(A)(3).
- (iii) Performance testing for the testing tier established in Condition III.(B)(4)(c)(ii)3. shall begin April 1 of each year and be in accordance with the following:
1. For a Tier 1 source, one test shall be completed during the third calendar quarter (July through September) each year testing is required.
 2. For a Tier 2 source, one test shall be completed during the third calendar quarter (July through September) and the second test shall be a minimum of four (4) months but no more than seven (7) months after the third calendar quarter test.
 - A. The emission factors determined from the third calendar quarter test shall be used at a minimum to calculate HAP emissions beginning April 1 and through October 31 of each year.
 - B. The emission factors determined from the second testing event shall be used at a maximum to calculate HAP emissions from November 1 through March 31 of each year.

3. For a Tier 3 source, the timeframe between tests shall be approximately the same number of days. The emission factor determined from each emission test may only be used in the calendar quarter the emission test was completed.
 4. For Tier 1, 2 and 3 sources that fail to perform or have invalid emission testing as required in Condition III.(B)(4)(c)(iii), the source shall use the highest emission factor for each pollutant determined from the last five valid emission tests until valid emission testing is completed, unless alternate emission factors are approved by the NDEQ.
- (iv) All testing conducted in accordance with Condition III.(B)(4)(c)(iii) shall also be used to obtain lb/hr VOC emission factors for the Process scrubber (CE-06).
1. The source shall use the same calculation methodology as required in Condition III.(B)(4)(c)(ii)2. to calculate VOC emissions from the Process Scrubber (CE-06).
- (v) The testing protocol required in Condition I.(M)(1)(b) shall identify all operating ranges that testing, as required in this condition, will cover.
- (vi) Only one valid performance test may be conducted at each operating range when conducting performance tests on the Fermentation and Distillation Scrubber (CE-06).
1. Subsequent performance tests may be conducted if the facility chooses to change any one or all operational parameters (chemical addition rate, type of chemical used, chemical concentration, and liquid flow rate) in order to demonstrate compliance with permitted limits.
- (d) The permittee shall install a certified CEMS within 180 days of issuance of this permit [Title 129, Chapter 8, Sections 004.01B and 012.01; and Chapter 34, Section 001].
- (e) In order to demonstrate compliance with the VOC and HAP limitations in Condition III.(B)(3)(a), the permittee shall obtain pounds per hour (lb/hr) emission for the single greatest HAP, total HAPs and VOCs by installing and operating a certified CEMS (consisting of a FTIR, VOC and flow CEM system) on Scrubber Control Systems CE-06 within 180 days of air operating permit issuance. [Title 129, Chapter 8, Section 015.01].
- (f) When the installation and operation begins on a certified CEMS or PEMS monitoring system, the operational, monitoring, and testing requirements in Condition III.(B)(4)(b) and (c) are no longer in effect. The conditions below shall be in effect after the installation and operation begins of a certified CEMS or PEMS monitoring system: [Title 129, Chapter 8, Section 015]
- (i) When the CEMS or PEMS monitoring system date of installation is set, the permittee shall notify the NDEQ at least sixty (60) days prior to installation of the monitoring system.
- (ii) Upon installation of a CEMS or PEMS, the permittee shall meet the following, as appropriate:
1. All CEMS shall:
 - A. Comply with applicable Performance Specifications found in 40 CFR Part 60, Appendix B and F, 40 CFR 60.13 and 40 CFR 60.7.
 - B. Exhaust gas flow rate and monitored pollutant concentrations shall be continuously monitored and record data at least every 15 minutes.

- C. Sample, analyze, and record data at least every 15 minutes while the emissions unit is operating.
 - D. Until Fourier Transform Infrared (FTIR) CEMS testing is addressed by 40 CFR Part 60, Appendix F, the NDEQ shall require a Relative Accuracy Test Audit (RATA) once every eight (8) calendar quarters and a Cylinder Gas Audit (CGA) every calendar quarter that a RATA does not occur.
2. Data Substitution for FTIR and/or VOC CEMS:
- A. In the event that the CEMS becomes non-operational, the permittee shall operate equipment in accordance with the following requirements until the CEMS is operational again:
 - (i) For the first twenty-four (24) hours of such an event, the permittee shall either comply with the short-term outage mode specified in Condition III.(B)(4)(f)(ii)(2)(B) or the long-term outage mode specified in Condition III.(B)(4)(f)(ii)(2)(C).
 - (ii) After the first twenty-four (24) hours of such an event, the permittee shall comply with the long-term outage mode specified in Condition III.(B)(4)(f)(ii)(2)(C).
 - B. For the first twenty-four (24) hours of a CEMS outage, the permittee may operate in a short-term outage mode with the following requirements:
 - (i) The Scrubber (EP-6) operating parameters shall be maintained at the settings used immediately prior to the outage or at settings which will result in reduced emissions (e.g. increased water and/or chemical flow rates).
 - (ii) VOC and HAP hourly emission rates for this period shall be considered equal to the average rate for the hour immediately prior to the CEMS outage.
 - C. After the first twenty-four (24) hours, and optionally for the first twenty-four (24) hours, of a CEMS outage the permittee shall operate with the following requirements:
 - (i) The Scrubber (EP-6) operating parameters shall be maintained at the settings used to develop emission rates for Condition III.(B)(4)(f)(ii)(2)(D).
 - (ii) VOC and HAP hourly emission rates for this period shall be considered equal to the emission rates developed in accordance with Condition III.(B)(4)(f)(ii)(2)(D).
 - D. The permittee shall develop emission rates for long-term CEMS outages in the following manner:
 - (i) In the third quarter of each year, an average hourly rate calculated during a full fermentation cycle shall be established during consistent water and chemical addition rates and (standard deviation of less than 20% of the mean) for the Scrubber Control System during normal plant operation. An emission factor for data substitution shall be derived by calculating the average hourly emission rate during this full fermentation cycle and used for each hour of CEMS non-operational period.

- (ii) Optionally, from November 1 to March 31, an average hourly rate calculated during a full fermentation cycle can be established during consistent water and chemical addition rates and (standard deviation of less than 20% of the mean) for the Scrubber Control System during normal plant operation to be utilized from November 1 to March 31. An emission factor for data substitution shall be derived by calculating the average hourly emission rate during this full fermentation cycle and used for each hour of CEMS non-operational period from November 1 to March 31.
 - (iii) Failure to derive a full fermentation cycle emission factor within the third quarter of each year shall not be potentially considered a violation of this permit condition unless the derivation was not conducted in the third quarter for two successive years.
 - (iv) A full fermentation cycle is defined as being the duration from when a fermentation tank begins to fill to when that same tank begins to fill again.
- (g) A source representative shall conduct visible emissions survey for each emission point, EP-6, on a daily basis. These surveys shall be conducted during daylight hours while each emission unit is in operating under normal conditions [Title 129, Chapter 8, Sections 004.01B and 015; Chapter 20, Section 004].
 - (i) For deviation reporting purposes, visible emissions (excluding water vapor) from any emission point shall be considered a deviation and shall be reported in accordance with Condition II.(A)(2).

(5) Recordkeeping and Reporting Requirements:

- (a) The permittee shall keep inspection and maintenance records for the CO₂ scrubber (EP-6), to demonstrate compliance with Condition III.(B)(4)(b), which shall include the following: [Construction Permit, CP14-066, Condition III.(B)(5)(a) through (g), Issued October 9, 2015]
 - (i) Records that document the operating parameter data for the scrubber, including the date and time of the readings. The records shall include:
 - 1. Scrubbing liquid flow rate;
 - 2. Chemical addition flow rate;
 - 3. Scrubber pressure differential readings; and
 - 4. Scrubbing liquid temperature readings.
 - (ii) Monthly records that document the amount, concentration, and type of chemical injected into the water supplied to the scrubber.
 - (iii) Monthly records that document the purchase date, concentration, amount, and type of chemical purchased for chemical injection associated with the scrubber.
 - (iv) Records that document the operating parameters developed during the most recent valid performance test conducted at the facility.
 - (v) Records documenting date and time of routine observations with a description, including operating parameters, atypical parameters observed, and any corrective actions taken, for each day the scrubber is in operation.

- (vi) Each corrective action taken shall be documented upon occurrence, including the date, time, observations, and a description of the corrective action.
- (vii) Records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action performed.
- (b) The permittee shall keep the recordkeeping and reporting associated with the CEMS to demonstrate VOC and HAP emissions from CE-06 in shall be in accordance with 40 CFR 60.7 [Title 129, Chapter 8, Section 015]:
 - (i) The semiannual reports specified in 40 CFR 60.7(c) and required by Condition III.(B)(5)(b) shall also include the following information:
 1. The acetaldehyde quantity recorded for each month in the reporting period.
 2. A Data Assessment Report for the CEMS which at a minimum shall containing the information specified in 40 CFR 60 Appendix F, Procedure 1, Section 7: Reporting Requirements.
 3. Monitoring Requirements in accordance with 40 CFR 6013.
 4. Notification and Recordkeeping Requirements in accordance with 40 CFR 60.7
 5. Performance Specification in accordance with 40 CFR 60 Appendix B, follow the appropriate Performance Specification(s).
 6. Requirements in accordance with 40 CFR 60 Appendix F Procedure I.
 7. Requirements in accordance with §60.4370(b).
- (c) The results of each visible emissions survey for the emission point EP-6 shall be recorded in a log, which shall include, at a minimum, the following items [Title 129, Chapter 8, Section 015.03]:
 - (i) The emission points included in the survey.
 - (ii) All emission points from which visible emissions occurred (except for water vapor).
 - (iii) Emission points for which the emission units were not in operation during the survey.
 - (iv) Each entry shall be dated and initialed by the person taking the opacity readings.

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(C) Specific Conditions for Storage Tanks

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-TK-801A	None	EU-TK-801A: Anhydrous Ethanol Storage Tank; 22,600 gallon maximum capacity; Vertical, Above ground; Installed 2006	None
EP-TK-801B	None	EU-TK-801B: Anhydrous Ethanol Storage Tank; 22,600 gallon maximum capacity; Vertical, Above ground; Installed 2006	None
EP-TK-803	None	EU-TK-803: Off-spec Ethanol (190 Proof Ethanol) Storage Tank; 22,600 gallon maximum capacity; Vertical, Above ground; Installed 2006	None
EP-TK-808	None	EU-TK-808: Denaturant Storage Tank; 22,600 gallon maximum capacity; Vertical, Above ground; Internal Floating Roof; Installed 2006	NSPS Subparts A and Kb
EP-TK-810	None	EU-TK-810: Denatured Ethanol Storage Tank; 535,830 gallon maximum capacity; Vertical, Above ground; Internal Floating Roof; Installed 2006	NSPS Subparts A and Kb

(2) Applicable NSPS and NESHAP Requirements:

- (a) The source shall demonstrate compliance with all applicable NSPS Subparts A and Kb requirements for emission units EU-TK-808 and EU-TK-810 [Construction Permit, CP13-010, Condition III.(C)(4), Issued February 20, 2014; Title 129, Chapter 18, Sections 001.01 and 001.62].
- (b) At the time of permit issuance, there are no NESHAP requirements applicable to emission units EU-TK-801A, EU-TK-801B, EU-TK-803, EU-TK-808 and EU-TK-810.
- (c) At the time of permit issuance, there are no NSPS requirements applicable to emission units EU-TK-801A, EU-TK-801B, and EU-TK-803.

(3) 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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-TK-801A, EP-TK-801B, EP-TK-803, EP-TK-808 and EP-TK-810	Opacity	< 20 Percent for each emission point ^[1]	6-Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1] Vapors that may escape the storage tanks are gaseous in nature, and no visible emissions are expected. No monitoring or testing is required for this limit.

- (b) The permittee shall comply with all applicable emission limitations and testing requirements in NSPS Subpart Kb for emission units EU-TK-808 and EU-TK-810 [Construction Permit, CP13-010, Condition III.(C)(2), Issued February 20, 2014; Title 129, Chapter 18, Sections 001.01 and 001.62].

(4) Operational and Monitoring Requirements:

- (a) The permittee shall comply with all applicable operational and monitoring requirements in NSPS Subpart Kb for emission units EU-TK-808 and EU-TK-810 [Construction Permit CP13-010, Condition III.(C)(4), issued February 20, 2014; Title 129, Chapter 18, Section 001.62].
- (i) EU-TK-808 and EU-TK-810 shall each be equipped with an internal floating roof in accordance with the specifications in 40 CFR 60, Subpart Kb. [Construction Permit, CP13-010, Condition III.(C)(3)(a), Issued February 20, 2014; Title 129, Chapters 18 and 27]
- (ii) EU-TK-808 and EU-TK-810 shall be visibly inspected and repaired in accordance with testing and procedures per 40 CFR 60, Subpart Kb. [Construction Permit, CP13-010, Condition III.(C)(3)(b), Issued February 20, 2014; Title 129, Chapters 18 and 27]
- (iii) EU-TK-808 and EU-TK-810 shall comply with all applicable operational and monitoring requirements and limitations of 40 CFR 60, Subparts A and Kb. [Construction Permit, CP13-010, Condition III.(C)(3)(c), Issued February 20, 2014; Title 129, Chapter 18]

(5) Recordkeeping and Reporting Requirements:

- (a) The owner or operator of the affected tanks shall report and keep records as described in 40 CFR 60. Subparts A and Kb [Construction Permit, CP13-010, Condition III.(C)(5), Issued February 20, 2014].
- (b) The permittee shall comply with all applicable recordkeeping and reporting requirements in NSPS Subpart Kb for emission units EU-TK-808 and EU-TK-810 [Title 129, Chapter 18, Sections 001.01 and 001.62].

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(D) Specific Conditions for Liquid Loadout

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-12	CE-12: Vapor Combustion Unit	EU-10: Ethanol Truck Loadout; Installed in 2006	None
		EU-12: Loadout Vapor Combustion Unit; maximum capacity 4.8 MMBtu/hr Flare, with the maximum capacity 0.1 MMBtu/hr pilot combusting natural gas, installed in 2006	None

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(D)(1).

(3) Emission Limitations and Testing Requirements:

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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-12	PM (filterable)	2.88 lb/hr ^[1]	Three 1-hour test runs or test method average	Title 129, Chapter 20, Section <u>002</u>	No
	Opacity	< 20 Percent ^[2]	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section <u>004</u>	No

^[1] Compliance with Condition III.(D)(4)(a) demonstrates compliance with PM (filterable) limitations.

^[2] Compliance with Condition III.(D)(4)(c) demonstrates compliance with opacity limitations for EP-12. Compliance with the opacity limitation is expected for EP-12, because the vapors that may escape are gaseous in nature, with no visible emissions.

(4) Operational and Monitoring Requirements:

- (a) The source shall use submerged loading when transferring liquid product from the storage tanks. [Construction Permit, CP13-010, Condition III.(D)(3)(a), Issued February 20, 2014; Title 129, Chapters 19 and 27]

- (b) The ethanol loadout facility shall be equipped with a vapor collection and control system that collects and routes the vapors generated from ethanol product loadout to a vapor combustion unit (EP-12). The operation of the vapor collection and control system shall be in accordance with the following requirements: [Construction Permit, CP13-010, Condition III.(D)(3)(b), Issued February 20, 2014; Title 129, Chapters 19, 27 and 34]
 - (i) The vapor collection and control system shall be operated whenever the ethanol loadout facility is in operation. [Construction Permit, CP13-010, Condition III.(D)(3)(b)(i), Issued February 20, 2014]
 - (ii) The vapor collection and control system shall be properly designed, installed, operated, and maintained. Manufacturer's specifications and instructions shall be kept on site and readily available to NDEQ representatives. [Construction Permit, CP13-010, Condition III.(D)(3)(b)(ii), Issued February 20, 2014]
 - (iii) When ethanol loadout is occurring, a flame shall be present at the flare. The facility must install an appropriate safety device or flame monitoring system to ensure that ethanol loadout cannot occur without the presence of a flame. [Construction Permit, CP13-010, Condition III.(D)(3)(b)(iii), Issued February 20, 2014]
- (c) A source representative shall conduct visible emissions survey for emission point, EP-12, on a daily basis. These surveys shall be conducted during daylight hours while the emission unit is operating under normal conditions [Title 129, Chapter 8, Sections 015.02; Chapter 20, Section 004].
 - (i) For deviation reporting purposes, visible emissions (excluding water vapor) from any emission point shall be considered a deviation and shall be reported in accordance with Condition II.(A)(2).
- (5) Recordkeeping and Reporting Requirements:
 - (a) The permittee shall keep records documenting when routine maintenance and preventive actions were performed on the vapor recovery system and flare with a description of the maintenance and/or preventative action performed [Construction Permit, CP13-010, Condition III.(D)(5), Issued February 20, 2014].
 - (b) The results of each visible emissions survey shall be recorded in a log, which shall include, at a minimum, the following items [Title 129, Chapter 8, Section 015.03]
 - (i) The emission points included in the survey.
 - (ii) All emission points from which visible emissions occurred (except for water vapor).
 - (iii) Emission points for which the emission units were not in operation during the survey.
 - (iv) Each entry shall be dated and initialed by the person taking the opacity readings.

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(E) Specific Conditions for Anaerobic Digestion and Steam Generation

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-4	-	EU-89a: Boiler #1; Maximum Capacity: 54.0 MMBtu/hr; Permitted Fuel Type: Natural Gas and Biogas; Installed 2010	NSPS Subparts A and Dc
		EU-89b: Boiler #2; Maximum Capacity: 49.59 MMBtu/hr; Permitted Fuel Type: Natural Gas and Biogas; Installed 2006	
EP-9	-	EU-95: Digester Flare; Maximum Capacity: 54.0 MMBtu/hr; Permitted Fuel Type: Natural Gas and Biogas; Installed 2006	None
EP-4 and/or EP-9	EU-95: Digester Flare EU-89a: Boiler #1 or EU-89b: Boiler #2	EU-90a: Anaerobic Digester #1	None
		EU-90b: Anaerobic Digester #2	

(2) Applicable NSPS and NESHAP Requirements:

The permittee shall demonstrate compliance with all applicable NSPS Subparts A and Dc requirements for emission units EU-89a and EU-89b. [Construction Permit CP14-066, Condition III.(E)(4), issued October 9, 2015; Title 129, Chapter 18, Sections 001.01 and 001.52]

(3) 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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-4	PM (filterable)	36.05 lb/hr ^[1]	Three 1-hour test runs or test method average	Construction Permit, CP13-010, Condition II.(H), issued February 20, 2014; Title 129, Chapter 20, Section <u>002</u>	No
	Opacity	≤ 20 percent ^[1]	6 Minutes	Construction Permit, CP13-010, Condition II.(I),	No

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
				issued February 20, 2014; Title 129, Chapter 20, Section 004	
EP-9	PM (filterable)	21.87 lb/hr ^[1]	Three 1-hour test runs or test method average	Construction Permit, CP13-010, Condition II.(H), issued February 20, 2014; Title 129, Chapter 20, Section 002	No
	Opacity	≤ 20 percent ^[1]	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No
EP-4 and EP-9	SO ₂	22.10 lbs/hr (combined)	24-hour Block Average	Construction Permit, CP14-066, Condition III.(E)(2)(a), issued October 9, 2015; Title 129, Chapter 17	Yes ^[2]
EU-90a, EU-90b, EU-89a, and EU-89b	TRS	11.6 lbs/hr (combined)	24-hour Block Average	Construction Permit, CP14-066, Condition III.(E)(2)(b), Issued October 9, 2015; Title 129, Chapters 4 and 17	Yes ^[2]

^[1] Compliance with PM (filterable) and Opacity is demonstrated due to natural gas and biogas combustion only as required in Condition III.(E)(4)(a).

^[2] See Condition III.(E)(3)(c) for specific testing requirements.

- (b) The permittee shall comply with all applicable emission limitations and testing requirements in NSPS Subpart Dc for emission units EU-89a and EU-89b. [Title 129, Chapter 18, Sections 001.01 and 001.52]
- (c) The permittee shall have a stack test performed on EP-4 and EP-9 while operating at maximum capacity no later than 180 days after permit issuance. Both EU-89a and EU-89b shall be operating at full capacity and shall be combusting biogas [Title 129, Chapter 8, Section 015.01].
- (4) Operational and Monitoring Requirements:
 - (a) The following emission units, EU-89a, EU-89b, and EU-95 shall combust only Biogas or Natural Gas. [Construction Permit, CP14-066, Condition III.(E)(3)(a), Issued October 9, 2015; Title 129, Chapters 17 and 20]

- (b) Biogas emissions from the anaerobic digesters (EU-90a and EU-90b) shall be combusted by emission units EU-89a, EU-89b, and EU-95 as specified in Condition III.(E)(1). [Construction Permit, CP14-066, Condition III.(E)(3)(b), Issued October 9, 2015; Title 129, Chapter 4]
- (c) EU-95 shall be operated with a flame present whenever biogas is flowing to the unit. A monitoring system, including a data recorder capable of continuously monitoring and recording the presence of a flame and biogas flow to EU-95, shall be installed to ensure that biogas flow to the flare cannot occur without the presence of a flame. The monitoring system shall be equipped with an alarm to notify plant personnel of biogas flow to the flare when no combustion is taking place. The monitoring device shall be properly installed, operated, calibrated and maintained. Manufacturer's instructions, or the equivalent, shall be kept on site and readily available to NDEQ representatives. [Construction Permit, CP14-066, Condition III.(E)(3)(c), Issued October 9, 2015; Title 129, Chapter 4]
- (d) SO₂ emissions from the boilers (EU-89a and EU-89b) and enclosed flare shall be calculated for each 24-hour block period by using the following equation. The biogas emission factor of 173.3 lb/MMscf shall be revised based on the results of the most recent valid performance test: [Construction Permit, CP14-066, Condition III.(E)(3)(d), Issued October 9, 2015; Title 129, Chapters 4 and 17]
- $$E_{SO_2} = (F_{NG} * 0.6 \text{ lb/MMscf} + F_{BG} * 173.3 \text{ lbs/MMscf}) / 24 \text{ hours}$$
- where,
- $$E_{SO_2} = \text{SO}_2 \text{ Emission Rate (lb/hr)}$$
- $$F_{NG} = \text{Natural Gas combusted in the boilers and enclosed flare (MMscf/24 hours)}$$
- $$F_{BG} = \text{Biogas combusted in the boilers and enclosed flare (MMscf/24 hours)}$$
- (e) The natural gas and biogas piping that supplies the boilers (EU-89a and EU-89b), and enclosed flare with fuel (EU-95) shall each be equipped with an operational flow meter to record the fuel flow rates to the boilers, and enclosed flare. The flow meters shall be installed, operated, and maintained in accordance with manufacturer's documentation, or the equivalent. The flow meters shall be calibrated at least once per year or more frequently per manufacturer's instructions. [Construction Permit, CP14-066, Condition III.(E)(3)(e), Issued October 9, 2015; Title 129, Chapters 4 and 17]
- (f) The biogas piping from EU-90a and EU-90b outlets to the boilers (EU-89a and EU-89b), and enclosed flare shall be equipped with a continuous TRS, methane monitor and flow meter which complies with the following requirements unless written approval is obtained from the NDEQ. [Construction Permit, CP14-066, Condition III.(E)(3)(f), Issued October 9, 2015; Title 129, Chapters 4, 17 and 34]
- (i) 40 CFR 60.13.
 - (ii) 40 CFR 60.7
 - (iii) 40 CFR 60 Appendix B Performance Specification, follow the appropriate Performance Specification(s).
 1. The span value of the continuous emissions monitoring system is two times the applicable emission limit, expressed as a concentration.
 - (iv) 40 CFR 60 Appendix F Procedure 1.
 1. All valid data shall be used in calculating emissions concentrations.

(v) §60.4370(b) [Title 129, Chapter 8, Section 013]

- (g) The permittee shall comply with all applicable operational and monitoring requirements in NSPS Subpart Dc for emission units EU-89a and EU-89b. [Construction Permit, CP14-066, Condition III.(E)(3)(g), Issued October 9, 2015; Title 129, Chapter 18, Section 001.52]

(5) Recordkeeping and Reporting Requirements:

- (a) The permittee shall keep records of flame presence and biogas flow to demonstrate compliance with Condition III.(E)(4)(c). [Construction Permit, CP14-066, Condition III.(E)(5)(a), Issued October 9, 2015]
- (b) The permittee shall keep records documenting the pound per hour (lb/hr) sulfur dioxide emissions (24-hour block average) to demonstrate compliance with Condition III.(E)(3)(a) [Construction Permit, CP14-066, Condition III.(E)(5)(b), Issued October 9, 2015].
- (c) The permittee shall keep records of the amount of natural gas and biogas combusted in the boilers (EU-89a and EU-89b), and enclosed flare each day to demonstrate compliance with Condition III.(E)(4)(d) [Construction Permit, CP14-066, Condition III.(E)(5)(c), Issued October 9, 2015].
- (d) The permittee shall keep records of hourly averaged TRS concentration of the Anaerobic Digester unit outlets to the flare (EU-95), and boilers (EU-89a and EU-89b). TRS quantities in the Anaerobic Digester unit (EU-90a and EU-90b) outlets to the flare, and boilers shall be compiled within 15 days after the end of each calendar month and the calculations shall be kept on file to document compliance with Condition III.(E)(2)(d) [Construction Permit, CP14-066, Condition III.(E)(5)(d), Issued October 9, 2015].
- (e) The permittee shall comply with all applicable recordkeeping and reporting requirements in NSPS Subpart Dc for emission units EU-89a and EU-89b. [Construction Permit, CP14-066, Condition III.(E)(5)(e), Issued October 9, 2015; Title 129, Chapter 18, Section 001.52].

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(F) Specific Conditions for Haul Roads

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-14	None	EP-14: On-site haul roads with production related truck traffic, paved	None

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission unit, EP-14, listed in Condition III.(F)(1).

(3) Emission Limitations and Testing Requirements:

The haul roads, EP-14, are subject to the requirements of Title 129, Chapter 32, Section 002. [Construction Permit, CP13-010, Condition III.(F)(2), Issued February 20, 2014]

(4) Operational and Monitoring Requirements:

- (a) All on-site haul roads with production-related truck traffic shall be paved. [Construction Permit, CP13-010, Condition III.(F)(1), Issued February 20, 2014; Title 129, Chapter 4]
- (b) The paved haul roads shall comply with the following conditions: [Construction Permit, CP13-010, Condition III.(F)(1), Issued February 20, 2014; Title 129, Chapter 4]
 - (i) The owner or operator shall utilize best management practices (BMP) to control emissions from haul roads to comply with Condition I.(L). The effectiveness of the BMP to minimize emissions from haul roads will be demonstrated by compliance with Condition I.(L). [Construction Permit, CP13-010, Condition III.(F)(3)(a), Issued February 20, 2014; Title 129, Chapter 32]
 - (ii) 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. [Construction Permit, CP13-010, Condition III.(F)(3)(b), Issued February 20, 2014; Title 129, Chapter 32]

(5) Recordkeeping and Reporting Requirements:

- (a) The permittee shall keep records shall be kept documenting the use of BMPs on haul roads. [Construction Permit, CP13-010, Condition III.(F)(5)(a), Issued February 20, 2014]
- (b) The permittee shall keep records shall be kept of haul road visible emissions checks taken daily during operation and a description of corrective action taken, if needed. [Construction Permit, CP13-010, Condition III.(F)(5)(b), Issued February 20, 2014]

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(G) Specific Conditions for Equipment Leaks

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-5	None	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 NSPS, Subpart VV located throughout the ethanol plant, constructed in 2006	NSPS Subparts A and VV

(2) Applicable NSPS and NESHAP Requirements:

- (a) At the time of permit issuance, there are no NESHAP requirements applicable to the emission units listed in Condition III.(G)(1).
- (b) The source shall demonstrate compliance with all applicable NSPS Subparts A and VV requirements for EP-5 [Construction Permit, CP13-010, Condition III.(G)(4), Issued February 20, 2014; Title 129, Chapter 18, Sections 001.01 and 001.14].

(3) 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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-5	Opacity	< 20 Percent ^[1]	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1]No visible emissions are expected, the vapors that may escape from the equipment leaks components are gaseous in nature.

- (b) The permittee shall comply with all applicable emission limitations and testing requirements in NSPS Subpart VV for emission point EP-5 [Construction Permit, CP13-010, Condition III.(G)(2), Issued February 20, 2014; Title 129, Chapter 18, Sections 001.01 and 001.14].

(4) Operational and Monitoring Requirements:

The permittee shall comply with all applicable operational and monitoring requirements in

NSPS Subpart VV for emission point EP-5 [Construction Permit, CP13-010, Condition III.(G)(3), Issued February 20, 2014; Title 129, Chapter 18, Sections 001.01 and 001.14].

(5) Recordkeeping and Reporting Requirements:

The permittee shall comply with all applicable recordkeeping and reporting requirements in NSPS Subpart VV for emission point EP-5 [Construction Permit, CP13-010, Condition III.(G)(5), Issued February 20, 2014; Title 129, Chapter 18, Sections 001.01 and 001.14].

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(H) Specific Conditions for Cooling Tower

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-13	None	EP-13: Cooling Tower; 1 cell; Maximum Circulation rate of 866,640 gal/hr; Installed in 2006	None

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(H)(1).

(3) Emission Limitations and Testing Requirements:

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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-13	PM (filterable)	95.44 lb/hr ^[1]	Three 1-hour test runs or test method average	Construction Permit, CP13-010, Condition II.(G), issued February 20, 2014; Title 129, Chapter 20, Section 001	No
	Opacity	< 20 Percent ^[2]	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1] The process weight rate limit [Title 129, Chapter 20, Section 001] in this table is based on the maximum design throughput of the emission unit. The process weight rate limit will vary with the actual throughput in accordance with Title 129, Chapter 20, Table 20-2.

^[2] Compliance with Condition III.(H)(4)(a) and III.(H)(4)(b) demonstrates compliance with PM and Opacity limitations.

(4) Operational and Monitoring Requirements:

- (a) Drift loss from each cooling tower shall be limited to 0.005 percent. Verification of drift loss shall be manufacturer's design specification. Manufacturer's drift loss specifications

shall be kept on site and readily available to NDEQ representatives, upon request, for the life of the unit. [Construction Permit, CP13-010, Condition III.(G)(3)(a), Issued February 20, 2014; Title 129, Chapter 19]

- (b) TDS concentration of the cooling water in each cooling tower shall not exceed 2,400 ppm. A representative TDS sample shall be collected and tested from the cooling tower a minimum of once per calendar month. [Construction Permit, CP13-010, Condition III.(G)(3)(b), Issued February 20, 2014; Title 129, Chapters 4 and 19]

(5) Recordkeeping and Reporting Requirements:

- (a) Manufacturer's drift loss design specifications shall be kept on site. [Construction Permit, CP13-010, Condition III.(G)(5)(a), Issued February 20, 2014]
- (b) Records of TDS concentration in cooling tower water for each sampling event and the test method used shall be kept on site. [Construction Permit, CP13-010, Condition III.(G)(5)(b), Issued February 20, 2014]
- (c) The permittee shall keep records documenting when routine maintenance and preventive actions were performed with a description of the maintenance and/or preventive action performed. [Title 129, Chapter 8, Section 015.03]

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(I) Specific Conditions for WDGS Storage and Loadout

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-10	None	WDGS (Wet Distillers Grain with Solubles) Storage and Loadout; Maximum Capacity: 750 tons; Loadout Rate: 10.5 tons/hr; Material is transferred to storage area via Conveyor; and material is transferred from piles via front-end loader; Installed in 2006	None

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(I)(1).

(3) Emission Limitations and Testing Requirements:

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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-10	PM (Filterable)	33.38 lbs/hr ^{[1],[2]}	Three 1-hour test runs or test method average	Title 129, Chapter 20, Section 001	No
	Opacity	< 20 Percent ^[2]	6 Minutes	Construction Permit, CP13-010, Condition II.(I), issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1] The process weight rate in this table is based on the maximum design throughput of the emission unit. The process weight rate limit will vary with the actual throughput in accordance with Title 129, Chapter 20, Table 20-2.

^[2] Compliance is demonstrated through the composition of WDGS, which has a moisture content of approximately 65 percent.

(4) Operational and Monitoring Requirements:

Except for applicable requirements prescribed in Standard Condition I and General Condition II, this condition establishes no additional specific operational or monitoring requirements for the emission points or emission units identified in Condition III.(I)(1).

(5) Recordkeeping and Reporting Requirements:

Except for applicable requirements prescribed in Standard Condition I and General Condition II, this condition establishes no additional specific recordkeeping or reporting requirements for the emission points or emission units identified in Condition III.(I)(1).

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(J) Specific Conditions for Miscellaneous Equipment

(1) Permitted Emission Points:

The following table contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Emission Point ID#	Control Equipment ID# and Description	Emission Unit Description	Relevant Standards
EP-18	None	Mash Tank; Maximum Capacity: 4,200 gallons	None
-	None	EU-65a: Molecular Sieves #1	None
-	None	EU-65b: Molecular Sieves #2	None

(2) Applicable NSPS and NESHAP Requirements:

At the time of permit issuance, there are no NSPS or NESHAP requirements applicable to the emission units listed in Condition III.(J)(1).

(3) Emission Limitations and Testing Requirements:

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 Standard Condition I.(M).

Emission Point ID#	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
EP-18	Opacity	< 20 percent ^[1] for each emission unit	6 Minutes	Construction Permit, CP13-010, Condition II.(I), Issued February 20, 2014; Title 129, Chapter 20, Section 004	No

^[1] Compliance with the opacity limitation is demonstrated since the emission units emit small amounts of VOC, and not particulate matter.

(4) Operational and Monitoring Requirements:

Except for applicable requirements prescribed in Standard Condition I and General Condition II, this condition establishes no additional specific operational or monitoring requirements for the emission points or emission units identified in Condition III.(J)(1).

(5) Recordkeeping and Reporting Requirements:

Except for applicable requirements prescribed in Standard Condition I and General Condition II, this condition establishes no additional specific recordkeeping or reporting requirements for the emission points or emission units identified in Condition III.(J)(1).

III. SPECIFIC CONDITIONS FOR AFFECTED EMISSION POINTS

(K) Specific Conditions for Insignificant Activities:

- (1) The following table contains a description of insignificant activities at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit:

Insignificant Activity ID	Unit Description	Insignificance Criteria
SH1	Diesel-fired Space Heater, 0.215 MMBtu/hr, Maximum fuel use: 50 gallons/year	< 8.0 MMBtu/hr Heat Input Capacity
SH2	Diesel-fired Space Heater, 0.220 MMBtu/hr, Maximum fuel use: 50 gallons/year	< 8.0 MMBtu/hr Heat Input Capacity
T-899	21,193 gallon Diesel Storage Tank, Maximum throughput: ~ 100 gallons per year	Aggregate annual throughput of less than 1 million gallons for the entire facility

(2) Emission Limitations:

Each insignificant activity shall not exceed the permitted limits identified in the following table.

Insignificant Activities	Pollutant	Permitted Limit	Averaging Period	Basis for Permit Limit	Performance Testing Required
All units identified in III.(K)(1)	Opacity	< 20 percent for each unit	6 minutes	Construction Permit, CP13-010, Condition II.(I), Issued February 20, 2014; Title 129, Chapter 20, Section 004	No
All combustion units identified in III.(K)(1)	PM (filterable)	0.60 lb/MMBtu for each unit	1-Hour	Title 129, Chapter 20, Section 002	No

(3) Operational and Monitoring Requirements:

The insignificant activities identified in Condition III.(K)(1) are exempt from operational and monitoring requirements [Title 129, Chapter 7, Section 006.04, and Chapter 8, Sections 004.01B and 015].

IV. SPECIFIC CONDITIONS FOR MULTIPLE AFFECTED EMISSION POINTS:

Potential to emit (PTE) air quality pollutants for a stationary source must be calculated with the source operating continuously 24 hours per day, 365 days per year at maximum capacity under its physical and operational design (emission factor times 8,760 hours per year), unless otherwise limited in a federally enforceable permit or rule.

Condition IV contains a description of emission points, control equipment, emission units, and relevant standards at the source at the time of permit issuance, in accordance with operating permit application #16S2-001, received January 7, 2016, including any supporting information received prior to issuance of this permit

(A) Source-Wide Stack Height Requirements

- (1) Stack heights shall not be less than the following heights above ground level: [Construction Permit CP13-010, Condition II.(F), Issued February 20, 2014; Title 129, Chapter 4; Chapter 5, Section 001.03A1; Chapter 8, Sections 002 and 015.01]

Emission Point ID#	Emission Point Name	Minimum Stack Height (ft)
EP-1	Grain Receiving Baghouse	16
EP-3	Hammer Mill Baghouse	35
EP-4	Boiler Stack	79
EP-9	Anaerobic Digester Flare	33
EP-12	Vapor Combustion Unit	20
EP-13	Cooling Tower	28

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 stack dimensions do not comply with the table above, the owner or operator shall notify the NDEQ prior to start-up of any emission unit and, if requested, submit a revised air dispersion modeling analysis to the NDEQ to ensure that the source will not interfere with the attainment or maintenance of the ambient air quality standards in Chapter 4.