



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Craig W. Butler, Director

8/18/2015

Stacy Schmidt
 Andersons Marathon Ethanol LLC
 PO Box 119
 Maumee, OH 43537

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
 Facility ID: 0819750245
 Permit Number: P0118714
 Permit Type: Administrative Modification
 County: Darke

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
 77 South High Street, 17th Floor
 Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org/clean_air

How to give us feedback on your permitting experience

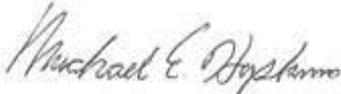
Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Regional Air Pollution Control Agency at (937)225-4435 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.
Assistant Chief, Permitting Section, DAPC

Cc: U.S. EPA
RAPCA; Indiana



FINAL

**Division of Air Pollution Control
Permit-to-Install
for
Andersons Marathon Ethanol LLC**

Facility ID:	0819750245
Permit Number:	P0118714
Permit Type:	Administrative Modification
Issued:	8/18/2015
Effective:	8/18/2015



Division of Air Pollution Control
Permit-to-Install
for
Andersons Marathon Ethanol LLC

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Final Permit-to-Install
Andersons Marathon Ethanol LLC
Permit Number: P0118714
Facility ID: 0819750245
Effective Date: 8/18/2015

Authorization

Facility ID: 0819750245
Facility Description: Ethanol Fuel Production
Application Number(s): M0003319
Permit Number: P0118714
Permit Description: Administrative Modification to PTI P0117467 to add a beer degasser to emissions unit P006.
Permit Type: Administrative Modification
Permit Fee: \$625.00
Issue Date: 8/18/2015
Effective Date: 8/18/2015

This document constitutes issuance to:

Andersons Marathon Ethanol LLC
5278 SEBRING WARNER RD
Greenville, OH 45331

of a Permit-to-Install for the emissions unit(s) identified on the following page.

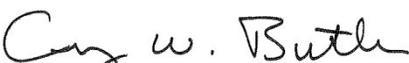
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Regional Air Pollution Control Agency
117 South Main Street
Dayton, OH 45422-1280
(937)225-4435

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Craig W. Butler
Director



Final Permit-to-Install
Andersons Marathon Ethanol LLC
Permit Number: P0118714
Facility ID: 0819750245
Effective Date:8/18/2015

Authorization (continued)

Permit Number: P0118714
Permit Description: Administrative Modification to PTI P0117467 to add a beer degasser to emissions unit P006.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P006
Company Equipment ID:	Fermentation Units, Beer Well, and Beer Degasser
Superseded Permit Number:	P0117467
General Permit Category and Type:	Not Applicable



Final Permit-to-Install
Andersons Marathon Ethanol LLC
Permit Number: P0118714
Facility ID: 0819750245
Effective Date: 8/18/2015

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
- (1) Standard Term and Condition A.2.a), Severability Clause
 - (2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements
 - (3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements
 - (4) Standard Term and Condition A.9., Reporting Requirements
 - (5) Standard Term and Condition A.10., Applicability
 - (6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install
 - (7) Standard Term and Condition A.14., Public Disclosure
 - (8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (9) Standard Term and Condition A.16., Fees
 - (10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

- a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
- b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - (1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Regional Air Pollution Control Agency.

- (2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Regional Air Pollution Control Agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.
 - (3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the Regional Air Pollution Control Agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - (4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Regional Air Pollution Control Agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

- a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Regional Air Pollution Control Agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Regional Air Pollution Control Agency.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Regional Air Pollution Control Agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

- a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.
- b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

- c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).
- d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

- e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

- a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.
- b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.



Final Permit-to-Install
Andersons Marathon Ethanol LLC
Permit Number: P0118714
Facility ID: 0819750245
Effective Date: 8/18/2015

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:
 - a) None.
2. This permit establishes the following federally enforceable limitations for the purpose of avoiding Prevention of Significant Deterioration (PSD) for nitrogen oxides (NO_x).

The combined NO_x emissions from the emissions units identified below shall not exceed the rolling 12-month limitations listed in the following table:

	Emissions Unit Identification Numbers	Process Descriptions	Emissions Limitation Applies	Rolling 12-Month NO _x Emissions Limitation (tons)	Rolling 12-Month Production Limitation
a.	B001, B002, P005, P007, P008, P009, P010, P011, P013 and P902	RTO/waste heat recovery boilers, methanators, DDGS cooling & handling	Stack S10	214.62	488,000 tons dried distillers grain solubles (DDGS) production
b.	J001	Loadout Rack	Loadout flare Stack S50	4.31	154,000,000 gallons denatured ethanol and E-85 processed
c.	F002	Grain Dryer	Grain Dryer	7.50	560,000 tons grain throughput
d.	P013	Methanators	Methanator flare Stack S60	1.97	None. Emissions limitation reflects potential to emit.

The permittee shall collect and record the following information each month for each of the emissions unit group listed in a. through d. in the table above:

- a) The NO_x emissions for emissions unit group, in tons, (calculated in accordance with the applicable compliance methods specified in the terms and conditions for emissions unit contained in C. Emissions Unit Terms and Conditions according to the applicable PTIO for each emissions unit);
 - b) The rolling 12-month NO_x emissions for each emissions unit group, in tons, (the sum of the NO_x emissions calculated according to a) for the previous 12-months).
 - c) The combined NO_x emissions during the rolling 12-month period, in tons, for all emissions unit groups (the sum of the NO_x emissions calculated according to b) for the previous 12-months).
3. The NO_x emissions for the facility shall not exceed 229.26 tons per year, based upon a rolling, 12-month summation of the monthly emissions. The permittee shall calculate and maintain monthly records of the NO_x emissions and the rolling 12-month emissions of NO_x. Compliance shall be based upon the record keeping requirements specified in B.5. and in accordance with the applicable compliance methods specified in Section C. Emissions Unit Terms and Conditions for each emissions unit. NO_x

emissions from any insignificant or De Minimis emission units operating at the facility shall be included in the determination of the facility NOx emissions.

4. This permit establishes the following federally enforceable limitations on emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, for the purpose of avoiding Maximum Achievable Control Technology (MACT) regulations.

The actual emissions from emissions units B001, B002, F002, P005, P006, P007, P008, P009, P010, P011, P013, P014, P801, P902, J001, T001, T002, T003, T004, T005, T006 and including any De Minimis emissions units as defined in OAC rule 3745-15-05, registration status emission units, permit exempt, and permit-by-rule emissions units pursuant to OAC rule 3745-31-03, shall not exceed 9.9 tons for any single HAP or 24.9 tons for all HAPs combined, based upon a rolling, 12-month summation.

5. The permittee shall submit quarterly deviation (excursion) reports that identify:
- a) all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
- (1) any exceedances of the rolling, 12-month NOx emissions limitations listed for the emissions unit groups listed in Table 2.a. through 2.d.,
 - (2) any exceedance of the rolling, 12-month NOx emissions limitation for the facility,
 - (3) any exceedance of the rolling, 12-month individual HAP emission limitation for each HAP; and
 - (4) any exceedance of the rolling, 12-month total combined HAPs emission limitation.

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).



Final Permit-to-Install
Andersons Marathon Ethanol LLC
Permit Number: P0118714
Facility ID: 0819750245
Effective Date: 8/18/2015

C. Emissions Unit Terms and Conditions

1. P006, Fermentation Units, Beer Well, and Beer Degasser

Operations, Property and/or Equipment Description:

Nine Fermentation Units, Beer Well and Beer Degasser controlled with Scrubbers

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b(1)b. and b(1)h.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	<p>Particulate emissions (PE) from this emissions unit shall not exceed 0.21 lb/hr and 0.77 tons per year.</p> <p>Emissions of particulate matter less than 10 microns in diameter (PM₁₀) shall not exceed 0.11 lb/hr and 0.41 tons per year.</p> <p>See b)(2)c.</p>
b.	OAC rule 3745-31-05(A)(3)(b), as effective 12/01/06	See b)(2)d.
c.	ORC 3704.03(T)	<p>Volatile organic compound (VOC) emissions from the fermentation scrubber exhaust Stack S40 shall not exceed 44.73 tons, per rolling 12-month period.</p> <p>Volatile organic compound (VOC) emissions from the purge scrubber exhaust Stack S41 shall not exceed 6.39 tons, per rolling 12-month period.</p> <p>Emissions from this emissions unit shall be vented to a scrubber, at all times when the emissions unit is operating, that controls the VOC emissions at a minimum of 98%.</p> <p>See b)(2)b.</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-31-05(D) (voluntary restrictions to establish potential to emit for HAPs)	HAP emissions from this emissions unit shall not exceed: 5.11 tons of single HAP per rolling 12-month period and; 5.32 tons of combined HAPS per rolling 12-month period.
e.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 60% opacity.
f.	OAC rule 3745-17-11(B)(1)	The emission limit established in this rule is less stringent than the emission limit established per OAC rule 3745-31-05(A)(3). Pursuant to Figure II of this rule, the PE from this emissions unit shall not exceed 2.10 lbs/hr.
g.	OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801 in Section C.7.
h.	ORC 3704.03(F) and OAC rule 3745-114-01	See d)(9), d)(10) and e)(2).

(2) Additional Terms and Conditions

- a. This emissions unit has two operating scenarios dependent on the operation of a separate dry ice production facility which uses the exhaust from this emissions unit as a feedstock.
 - i. When the dry ice facility is in operation, emissions from this emissions unit are vented to the fermentation scrubber, a fraction of which is then diverted to the dry ice facility. The remaining fraction is vented to the atmosphere via Stack S40. If emissions from the fermenter cleaning in place (CIP) and initial fermenter filling degrade the purity of the emissions vented to the dry ice facility, then the CIP and initial fermenter filling emissions are diverted to the purge scrubber and vented to the atmosphere via Stack S41, while the remaining emissions continue to be diverted between fermentation scrubber Stack S40 and the dry ice facility.
 - ii. When the dry ice facility is not in operation, all emissions from this emissions unit are vented to the atmosphere via the fermentation scrubber and Stack S40, and the purge scrubber and Stack S41 when the purge scrubber is operation.

- b. Best available technology (BAT) control requirements for the VOC emissions from this emissions unit has been determined to be the following:
- i. implementation of a fugitive leak detection and repair program (LDAR) for all the miscellaneous process equipment associated with this emissions unit; and
 - ii. venting emissions to a wet scrubber (fermentation scrubber and/or purge scrubber) to control the VOC emissions at a minimum of 98%.

BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.
- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM10 emissions from this air contaminant source since the uncontrolled potential to emit for PE and PM10 is less than 10 tons/yr.

Permit to Install P0110097 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) for HAPs as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

- i. The production of undenatured ethanol shall not exceed 146,666,667 gallons per rolling 12-month period. [OAC 3745-31-05(D)]
- ii. Emissions from this emissions unit (from fermentation scrubber and purge scrubber combined) shall not exceed:
 - (a) 5.11 tons of single HAP per rolling 12-month period; and

- (b) 5.32 tons of combined HAPs per rolling 12-month period. [OAC 3745-31-05(D)]
 - e. The permittee shall include the appropriate process equipment and regulated components in a site fugitive Leak Detection and Repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (includes operational restrictions, monitoring and recordkeeping, reporting, and testing) of OAC rule 3745-21-09(DD) Leaks from process units that produce organic chemicals, and 40 CFR 60 Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry).
 - f. The rolling 12-month allowable emission rates are based on the annual production of 146,666,667 gallons of undenatured ethanol.
 - g. This emissions unit is permitted at its potential to emit, as defined in OAC rule 3745-31-01, for all pollutants.
- c) Operational Restrictions
- (1) Emissions from this emissions unit shall be vented to a wet scrubber (fermentation scrubber or purge scrubber) at all times when the emissions unit is in operation, and the scrubbers shall control the VOC, PE and PM₁₀ emissions at a minimum of 98%.
 - (2) The amount of undenatured ethanol produced from this emissions unit shall not exceed 146,666,667 gallons, per rolling 12-month period.
- d) Monitoring and/or Recordkeeping Requirements
- (1) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the fermentation scrubber that shall be maintained in order to demonstrate compliance shall not be less than 8.7 inches of water. (The pressure drop range for the fermentation scrubber measured during emissions testing conducted on September 23 & 24, 2014 was 13.0 – 21.1 inches of water.)
 - (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable water flow rate to the fermentation scrubber that shall be maintained in order to demonstrate compliance, shall not be less than 5% less than the average water flow rate to the fermentation scrubber measured during the most recent performance test that demonstrated the emissions unit was in compliance. (The current acceptable water flow rate to the fermentation scrubber is 124 gallons per minute based on emissions testing conducted on September 23 & 24, 2014.)
 - (3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber, that shall be maintained in order to demonstrate compliance, shall not be less than the average rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber measured during the most recent performance test that demonstrated the emissions unit was in compliance. If an equivalent to sodium bisulfite or an alternate concentration of sodium bisulfite is used, the acceptable rate of the

equivalent material addition to fermentation scrubber shall contain the same quantity of sulfite ion as the acceptable sodium bisulfite addition rate. (The current acceptable rate of the equivalent ammonium bisulfite addition to the fermentation scrubber is 163 milliliters per minute of 39% v/v ammonium bisulfite solution ($\pm 1\%$ v/v) based on emissions testing conducted on September 23 & 24, 2014.)

- (4) In order to maintain compliance with the applicable emission limitation(s) contained in this permit when this emissions unit is operating in operating scenario b)(2)a.i. (the purge scrubber is venting to the atmosphere), the acceptable range for the pressure drop across the purge scrubber shall be between 0.4 and 17 inches of water (manufacturer's specifications).
- (5) In order to maintain compliance with the applicable emission limitation(s) contained in this permit when this emissions unit is operating in operating scenario b)(2)a.i. (the purge scrubber is venting to the atmosphere), the acceptable minimum limit for the water flow rate to the purge scrubber shall be based upon the manufacturer's specifications until performance testing is conducted and the appropriate minimum limit is established to demonstrate compliance.
- (6) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the fermentation scrubber and purge Scrubber (in inches of water column), the fermentation scrubber and purge scrubber water flow rates (in gallons per minute), and the rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber (in milliliters per minute) during operation of this emissions unit, as appropriate for the operating scenarios in b)(2)a, including periods of startup and shutdown. The permittee shall record the pressure drops across the scrubbers, the scrubber water flow rates, and the rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber on a once per shift basis, as appropriate for the operating scenarios in b)(2)a. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates below the minimum limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the control equipment parameters at or above the minimum limit(s) specified in this permit, unless the permittee determines

that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop(s), scrubber water flow rate(s), and rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

These minimum limits for the pressure drops, scrubber water flow rates, and rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted minimum limit(s) for the pressure drop(s), scrubber water flow rate(s), or rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for this emissions unit. In addition, approved revisions to the minimum limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (7) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (8) The permittee shall maintain monthly records of the following information:
- a. the operating hours for the emissions unit;
 - b. the operating hours for the purge scrubber;
 - c. the quantity of CO₂ sent to the dry ice production facility, in mmcf;
 - d. the undenatured ethanol production rate for each month;
 - e. the rolling, 12-month summation of the undenatured ethanol production;
 - f. the VOC, PE, PM10, single HAP and combined HAP emissions, in tons, from fermentation scrubber Stack S40; and
 - g. the VOC, PE, PM10, single HAP and combined HAP emissions, in tons, from purge scrubber Stack S41.
 - h. the VOC, PE, PM10, single HAP and combined HAP emissions, in tons, for the fermentation scrubber Stacks S40 and purge scrubber Stack S41, combined; and
 - i. the rolling, 12-month summation of VOC, PE, PM10, single HAP and combined HAP emissions, in tons, for the fermentation scrubber Stacks S40 and purge scrubber Stack S41, combined.
- (9) The permit to install (PTI) for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the PTIO application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the PTIO application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Acetaldehyde
TLV (mg/m^3): 33.20
Maximum Hourly Emission Rate (lbs/hr): 1.40
Predicted 1-Hour Maximum Ground-Level Concentration ($\mu\text{g}/\text{m}^3$): 61.20
MAGLC ($\mu\text{g}/\text{m}^3$): 790

(10) The above described evaluation determined that the maximum ground level concentration for the new or modified source was less than 80% of the MAGLC. Per ORC 3704.03(F)(4)(b), the owner or operator shall submit an annual report that describes any changes to the emissions unit that affect the air toxic modeling. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. each period of time (start time and date, and end time and date) when the emissions unit is in operation and the pressure drop across the fermentation scrubber, pressure drop across the purge scrubber, fermentation scrubber water flow rate, purge scrubber water flow rate, or the rate of sodium bisulfite (or equivalent) addition to the fermentation scrubber was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;
 - ii. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to either the fermentation scrubber or purge scrubber;

- iii. all exceedances of the rolling, 12-month limitation of the undenatured ethanol production; and
 - iv. all exceedances of the rolling, 12-month VOC, PE, PM₁₀, single HAP and combined HAP emissions limitations.
- b. Identification of the following information in accordance with the monitoring requirements for visible emissions in d)(7) above:
- i. all days during which any visible particulate emissions were observed from stacks serving this emissions unit; and
 - ii. any corrective actions taken to minimize or eliminate the visible particulate emissions.
 - iii. the probable cause of each deviation (excursion);
 - iv. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - v. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (2) The permittee shall submit annual reports that describe any changes to this emissions unit which affect the air toxic modeling. If no changes were made during the year, then a report shall be submitted stating that no changes were made. This report is due by January 31 of each year and shall cover the previous calendar year.
 - (3) The permittee shall submit annual reports which specify the total VOC, PE, PM₁₀, single HAP and combined HAPs emissions from this emissions unit for the calendar year. This report shall be submitted by April 15 of each year. This requirement may be satisfied by including and identifying the specific emission data from these emissions units in the annual Fee Emissions Report.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:



a. Emissions Limitation:

VOC emissions from the fermentation scrubber exhaust Stack S40 shall not exceed 44.73 tons, per rolling 12-month period.

Applicable Compliance Method:

This 12 month limitation was developed by multiplying the hourly after control potential to emit for this emissions unit (10.21 lb-VOC/hour, as an 8-hour average) by 8760 hours/years and dividing by 2000 lbs/ton. Compliance shall be demonstrated through performance testing as described in described in f)(2) and the monitoring and recordkeeping requirements in d)(8).

b. Emissions Limitation:

VOC emissions from the purge scrubber exhaust Stack S41 shall not exceed 6.39 tons, per rolling 12-month period.

Applicable Compliance Method:

This 12 month limitation was developed by multiplying the hourly potential to emit for the purge exhaust Stack S41 (1.46 lb-VOC/hour, as an 8-hour average) by 8760 hours/years and dividing by 2000 lbs/ton. Compliance shall be demonstrated through performance testing as described in described in f)(3) and the monitoring and recordkeeping requirements in d)(8).

c. Emissions Limitation:

PE shall not exceed 0.21 lb/hr

PE shall not exceed 2.10 lbs/hr [OAC rule 3745-17-11(B)(1)].

Applicable Compliance Method:

If required, compliance shall be demonstrated through emissions testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

d. Emissions Limitation:

PE shall not exceed 0.77 ton per rolling 12 month period.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements in d)(8) and shall be determined by using the following equation:

$$PE = [(10.51 \text{ lb PE/mmgal undenatured ethanol}) * (\text{rolling 12 month undenatured ethanol production, mmgal})] / 2,000 \text{ pounds/ton}$$



e. Emissions Limitation:

PM₁₀ emissions shall not exceed 0.41 ton per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements in d)(8) and shall be determined by using the following equation:

$$\text{PM}_{10} \text{ Emissions} = [(5.55 \text{ lb PM}_{10}/\text{mmgal undenatured ethanol}) * (\text{rolling 12 month undenatured ethanol production, mmgal})] / 2,000 \text{ pounds/ton}$$

f. Emission Limitation:

Single HAP emissions shall not exceed 5.11 tons per rolling 12-month period.

Combined HAP emissions shall not exceed 5.32 tons per rolling 12-month period.

Applicable Compliance Method

Compliance shall be based upon the record keeping requirements in d)(8) and shall be determined by using the following equation:

For each individual HAP,

$$\text{Individual HAP emissions} = \text{fermentation scrubber Stack S40 individual HAP emissions} + \text{purge scrubber Stack S41 individual HAP emissions}$$

$$\text{fermentation scrubber Stack S40 individual HAP emissions} = (\text{hourly emissions rate from Stack S40}) * (\text{annual operating hours of the emissions unit}) * [1 - (\text{annual quantity of CO}_2 \text{ sent to the dry ice production facility, mmcf}) / \{(\text{tested volumetric flue gas (i.e., CO}_2\text{) flow rate, mmcf/hr}) * (\text{annual operating hours of the emissions unit})\}] / 2,000 \text{ pounds/ton}$$

$$\text{purge scrubber Stack S41 individual HAP emissions} = (\text{hourly emissions rate from Stack S41}) * (\text{annual operating hours for the purge scrubber}) / 2,000 \text{ pounds/ton}$$

The hourly emissions rate of each individual HAP from Stacks S40 and S41 shall be determined through performance testing as described in f)(2) and f)(3) below.

To determine the annual emissions rate for combined HAPs, sum the annual emissions calculated above for each individual HAP.

(2) The permittee shall conduct, or have conducted, emissions testing of the fermentation scrubber (that exhausts to Stack S40) for this emissions unit in accordance with the following requirements:

a. An emissions compliance test of the fermentation scrubber was conducted on September 23 & 24, 2014 with seven fermentation units installed and operating

to satisfy the testing requirements specified in the Permit-To-Install P0110097 issued 9/23/2013. To ensure compliance with the above-mentioned applicable requirements, the permittee shall conduct, or have conducted, compliance performance testing for this emissions unit upon completing installation of the two additional fermentation tanks (for total of nine) identified in administrative modification P0117467 issued 12/15/2014, and the beer degasser identified in this permit.

The emissions testing shall be conducted between May 1, 2016 and September 30, 2016. Future testing will be required as needed and determined by Ohio EPA District Office or local air agency, and will be addressed in the Title V permit to be issued.

- b. The emissions testing shall be conducted to:
 - i. demonstrate compliance with the potential to emit for VOC of 10.21 lbs/hr for the fermentation scrubber Stack S40, as one 8-hour average;
 - ii. demonstrate compliance with the allowable combined emission rate (i.e., emissions from fermentation scrubber Stack S40 plus emissions from purge scrubber Stack S41) for single and combined HAPs;
 - iii. demonstrate compliance with the VOC control efficiency (98%) requirement for of the fermentation scrubber;
 - iv. establish the acceptable minimum limit for the water flow rate to the fermentation scrubber in d)(2) above; and
 - v. establish the acceptable minimum limit for the rate of sodium bisulfite (or equivalent) addition to the scrubber as identified in d)(3) above.
- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
 - i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
 - ii. Methods 18 or 320 from 40 CFR Part 60, Appendix A for total VOC and total HAPs (including, but not limited to, acetaldehyde, acetic acid, ethanol, formaldehyde, formic acid, 2-furaldehyde, methanol and acrolein*);
 - iii. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC control efficiency.

* With prior approval from the Regional Air Pollution Control Agency, the permittee may perform pre-screening to determine which VOC and HAPs should be tested.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
 - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- (3) The permittee shall conduct, or have conducted, emission testing of the purge scrubber (that exhausts to Stack S41) for this emissions unit in accordance with the following requirements:
- a. For the purge scrubber, the emissions testing shall be conducted within 180 days of initial startup of the purge scrubber.
 - b. The emission testing shall be conducted to:
 - i. demonstrate the potential to emit for VOC of 1.46 lbs/hr, as one 8-hour average from purge scrubber Stack S41;
 - ii. demonstrate compliance with the allowable combined emission rate (i.e., emissions from fermentation scrubber Stack S40 plus emissions from purge scrubber Stack S41) for single and combined HAPs;
 - iii. demonstrate compliance with the VOC control efficiency (98% for VOC) requirement for the purge scrubber; and
 - iv. establish the acceptable minimum limits for water flow rate to the purge scrubber as identified in d)(5) above.

- c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations:
- i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;
 - ii. Methods 18 or 320 from 40 CFR Part 60, Appendix A for total VOC and total HAPs (including, but not limited to, acetaldehyde, acetic acid, ethanol, formaldehyde, formic acid, 2-furaldehyde, methanol and acrolein*); and
 - iii. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC control efficiency.

* With prior approval from the Regional Air Pollution Control Agency, the permittee may perform pre-screening to determine which VOC and HAPs should be tested.

Alternative U.S. EPA approved test methods may be used with prior approval from the Regional Air Pollution Control Agency.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.



Final Permit-to-Install
Andersons Marathon Ethanol LLC
Permit Number: P0118714
Facility ID: 0819750245
Effective Date: 8/18/2015

g) Miscellaneous Requirements

- (1) None.