

AIR POLLUTION CONTROL PERMIT TO CONSTRUCT

Permittee: Name: Dakota Yeast, LLC	Permit Number: ACP-18297 v 1.0
Address: 18175 Red River Road W Wahpeton, ND 58075-9697	Permit Description: Future Title V
Source Name & Location: Dakota Yeast, LLC 18175 Red River Road W Wahpeton, ND Richland County	Source Type: Yeast Production
Date of Application: March 28, 2025	

Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), and the Air Pollution Control Rules of the State of North Dakota (Article 33.1-15 of the North Dakota Administrative Code or NDAC), and in reliance on statements and representations heretofore made by the permittee (i.e., owner) designated above, a Permit to Construct is hereby issued authorizing such permittee to construct and initially operate the source unit(s) at the location designated above. This Permit to Construct is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Environmental Quality (Department) and to any conditions specified below:

Date: _____

James L. Semerad
Director
Division of Air Quality

1. Project and Facility Emissions Units:

This Permit to Construct allows the construction and initial operation of the herein-mentioned new or modified equipment at the source. The source may be operated under this Permit to Construct until a Permit to Operate is issued unless this permit is suspended or revoked. The source is subject to all applicable rules, regulations, and orders now or hereafter in effect of the North Dakota Department of Environmental Quality and to the conditions specified herein.

Table 1-1 lists the new emissions units associated with the Project.

Table 1-2 lists all emissions units associated with the facility upon Project completion.

Table 1-1: Project Emissions Units (new to facility)

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Fermenter 5 (approx. 8,150 gals; seed, semi seed, and commercial batches)	5	5	None

Table 1-2: Facility Emissions Units upon Project Completion

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Fermenter 1 (approx. 32,600 gals; semi seed and commercial batches)	1	1	None
Fermenter 2 (approx. 32,600 gals; semi seed and commercial batches)	2	2	None
Fermenter 3 (approx. 32,600 gals; semi seed and commercial batches)	3	3	None
Fermenter 4 (approx. 8,150 gals; seed, semi seed, and commercial batches)	4	4	None
Fermenter 5 (approx. 8,150 gals; seed, semi seed, and commercial batches)	5	5	None

2. Applicable Standards, Restrictions and Miscellaneous Conditions:

A. Rescinded Permit to Constructs (PTC):

Upon the issuance date of this permit, ACP-17893 v1.0 (PTC18037) is rescinded in its entirety and replaced with the conditions of this permit.

B. National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Source Categories/Maximum Achievable Control Technology (MACT):

The permittee shall comply with all applicable requirements of the following MACT subparts, in addition to Subpart A, as referenced in Chapter 33.1-15-22 of the North Dakota Air Pollution Control Rules and 40 CFR 63.

- 1) Subpart CCCC – National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast (EUs 1 through 5).

C. VOC Emissions Restriction and Calculation Requirement:

- 1) VOC emissions from EUs 1 through 5 are restricted to 240 tons per year on a 12-month rolling total basis.
- 2) By the 15th day of each month, the owner/operator shall calculate and record the total VOC emissions (in tons) from the fermenters (EUs 1 through 5) for the previous month and for the previous 12 months (12-month rolling total). If total calculated combined VOC emissions exceed 240.0 tons/year in any 12-month period, the permittee shall notify the Department within 15 days of the date the calculation was made.

3. Emission Unit Limits:

Emission limits from the operation of the source unit(s) identified in Table 1-1 of this Permit to Construct (hereafter referred to as "permit") are as follows. Source units not listed are subject to the applicable emission limits specified in the North Dakota Air Pollution Control Rules.

Table 3-1 lists the facility wide permit emissions limits.

Table 3-2 lists the emissions limitations when manufacturing nutritional yeast as listed in Table 1 of 40 CFR 63, Subpart CCCC.

Table 3-1 Facility Wide Permit Emissions Limits

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Pollutant / Parameter	Emission Limit
Fermenters	1 through 5	1 through 5	VOC	240.0 tons/year (12-month rolling total)

Table 3-2 Emissions Limitations when Manufacturing Nutritional Yeast ^A

For each fed-batch fermenter producing yeast in the following fermentation stage	98-percent option	Average option	Batch Option ^B
Last stage	100 ppmv ^C	95 ppmv ^D	100 ppmv ^E
Second-to-last stage	200 ppmv ^C	190 ppmv ^D	200 ppmv ^E
Third-to-last stage	300 ppmv ^C	285 ppmv ^D	300 ppmv ^E

^A Batch-Average VOC Concentration (BAVOC) means the average VOC concentration in the fermenter exhaust over the duration of a batch.

^B Dakota Yeast indicated that batch option would be used for compliance at the time of this permit.

^C Measured as propane - for BAVOC for at least 98 percent of all batches in each 12-month calculation period described in § 63.2171(b) and (e).

- D Measured as propane - for the average BAVOC of all batches in this stage in each 12-month calculation period described in § 63.2171(c) and (e).
- E Measured as propane - for BAVOC for each batch.

4. Emission Testing Requirements:

A. Initial testing:

All initial testing will require a minimum of three runs, one hour each, unless otherwise specified in a federal subpart.

Table 4-1: Initial Emissions Testing for Project

Description (EU)	EP	Contaminant
Fermenter 5	5	VOC

A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33.1-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the permittee shall follow the procedures and formats in the Department's Emission Testing Guideline.¹

1) Test:

Within 180 days after initial startup, the permittee shall conduct emissions tests at the emission units listed in Table 4-1 using an independent testing firm, to determine the compliance status of the facility with respect to the emission limits specified in Table 3-1 Facility Wide Permit Emissions Limits. Emissions testing shall be conducted for the pollutants listed above in accordance with EPA Reference Methods listed in 40 CFR 60, Appendix B. Test methods other than those listed above may be used upon approval by the Department.

2) Notification:

The permittee shall notify the Department using the form in the Emission Testing Guideline, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department at least five days prior to the scheduled test date and coordinate a new test date with the Department.

¹ See February 7, 2020, North Dakota Department of Environmental Quality Division of Air Quality Emissions Testing Guidelines. Available at: https://www.deq.nd.gov/publications/AQ/policy/PC/Emission_Testing_Guide.pdf

3) Sampling Ports/Access:

Sampling ports shall be provided downstream of all emission control devices and in a flue, conduit, duct, stack or chimney arranged to conduct emissions to the ambient air. The ports shall be located to allow for reliable sampling and shall be adequate for test methods applicable to the facility. Safe sampling platforms and safe access to the platforms shall be provided. Plans and specifications showing the size and location of the ports, platform and utilities shall be submitted to the Department for review and approval.

4) Other:

- a) The Department may require the permittee to have tests conducted to determine the emission of air contaminants from any source, whenever the Department has reason to believe that an emission of a contaminant not addressed by the permit applicant is occurring, or the emission of a contaminant more than that allowed by this permit is occurring. The Department may specify testing methods to be used in accordance with good professional practice. The Department may observe the testing. All tests shall be conducted by reputable, qualified personnel. A signed copy of the test results shall be furnished to the Department within 60 days of the test date.

All tests shall be made available, and the results calculated in accordance with test procedures approved by the Department. All tests shall be done under the direction of people qualified by training or experience in the field of air pollution control as approved by the Department.

- b) The Department may conduct tests on emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

B. Sampling and Testing:

The Department may require the permittee to conduct tests to determine the emission rate of air contaminants from the source. The Department may observe the testing and may specify testing methods to be used. A signed copy of the test results shall be furnished to the Department within 60 days of the test date. The basis for this condition is NDAC 33.1-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the permittee shall follow the procedures and formats in the Department's Emission Testing Guideline.

5. Emissions Monitoring

Emission Unit Description	EP	Pollutant / Parameter	Monitoring Parameters
Fermenter 1	1	VOC	CEMS/CERMS
Fermenter 2	2	VOC	CEMS/CERMS
Fermenter 3	3	VOC	CEMS/CERMS
Fermenter 4	4	VOC	CEMS/CERMS
Fermenter 5	5	VOC	CEMS/CERMS

A. Continuous Emission Monitoring System (CEMS) and Continuous Emission Rate Monitoring System (CERMS):

The permittee shall maintain and operate equipment for continuously monitoring and recording VOC emissions from each fermenter as described in this condition.

- 1) Each CEMS/CERMS shall be installed, calibrated, maintained, and operated in accordance with 40 CFR 60, Appendix B and 40 CFR 60, Appendix F, except as specified within this condition.
- 2) Relative accuracy test audits (RATAs) of the VOC CEMS/CERMS shall be conducted by an independent testing firm and performed in accordance with 40 CFR 60, Appendix B, Performance Specification 6 or Performance Specification 8, as applicable. RATAs shall be performed triennially, with active CEMS/CERMS not to exceed 37 months between tests.
- 3) The permittee shall notify the Department using the form in the Emission Testing Guideline, or its equivalent, at least 30 calendar days in advance of any RATAs required by the Department. If the permittee is unable to conduct the RATA on the scheduled date, the permittee shall notify the Department at least five days prior to the scheduled RATA date and coordinate a new RATA date with the testing firm and the Department. A signed copy of the test results shall be furnished to the Department within 60 days of the RATA date. The basis of this condition is NDAC 33.1-15-01-12 which is hereby incorporated into this permit by reference. To facilitate preparing for and conducting such tests, and to facilitate reporting the test results to the Department, the permittee shall follow the procedures and formats in the Department's Emission Testing Guideline.
- 4) The Department may require additional performance audits of the CEMS/CERMS.
- 5) Inactive, or "spare", CEMS/CERMS are not required to undergo regular RATAs until they are put into active service. The Department must be notified within 15 days of putting a "spare" CEMS/CERMS into active service. The permittee is required to conduct initial RATA testing on a "spare" CEMS/CERMS within the first 90 days of active service. The RATA shall be conducted by an independent testing firm and performed in accordance with 40 CFR 60, Appendix B, Performance Specification 6 or Performance Specification 8, as applicable. Following the initial

RATA, the “spare” CEMS/CERMS will be considered an “active” CEMS/CERMS and must then undergo regular triennial RATA testing as described Condition 7.C.2).

6. General Conditions (Equipment):

A. Best Management Practices:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

B. Organic Compound Emissions:

The permittee shall comply with all applicable requirements of NDAC 33.1-15-07 – Control of Organic Compounds Emissions.

C. Air Pollution from Internal Combustion Engines:

The permittee shall comply with all applicable requirements of NDAC 33.1-15-08-01 – Internal Combustion Engine Emissions Restricted.

D. Fugitive Emissions:

The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17.

7. General Conditions (Procedural):

A. Construction:

Construction of the above-described facility shall be in accordance with information provided in the permit application as well as any plans, specifications and supporting data submitted to the Department. The Department shall be notified 10 days in advance of any significant deviations from the specifications furnished. The issuance of this Permit to Construct may be suspended or revoked if the Department determines that a significant deviation from the plans and specifications furnished has been or is to be made.

Any violation of a condition issued as part of this permit to construct as well as any construction which proceeds in variance with any information submitted in the application, is regarded as a violation of construction authority and is subject to enforcement action.

B. Startup Notice:

A notification of the actual date of initial startup shall be submitted to the Department within 15 days after the date of initial startup.

C. Permit Invalidation:

This permit shall become invalid if construction does not commence within 18 months after issuance of such permit, if construction is discontinued for a period of 18 months or more; or if construction is not completed within a reasonable time.

D. Source Operations:

Operations at the installation shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.

E. Alterations, Modifications, or Changes:

Any alteration, repairing, expansion, or change in the method of operation of the source which results in the emission of an additional type or greater amount of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, repairing, expansion or change in the method of operation.

F. Title V Permit to Operate:

Within one year after issuance of this permit, the permittee shall submit a permit application for a Title V Permit to Operate for the facility.

G. Recordkeeping:

The permittee shall maintain any compliance monitoring records required by this permit or applicable requirements. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application. Support information may include all calibration and maintenance records and all original strip-chart recordings/computer printouts for continuous monitoring instrumentation, and copies of all reports required by the permit.

H. Annual Emission Inventory/Annual Production Reports:

The permittee shall submit an annual emission inventory report and/or an annual production report upon Department request, on forms supplied or approved by the Department.

I. Malfunction Notification:

The permittee shall notify the Department of any malfunction which can be expected to last longer than twenty-four hours and can cause the emission of air contaminants in violation of applicable rules and regulations.

J. Nuisance or Danger:

This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.

K. Transfer of Permit to Construct:

The holder of a permit to construct may not transfer such permit without prior approval from the Department.

L. Right of Entry:

Any duly authorized officer, employee or agent of the North Dakota Department of Environmental Quality may enter and inspect any property, premise or place at which the source listed in Condition 1 of this permit is located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

M. Other Regulations:

The permittee of the source unit(s) described in Condition 1 of this permit shall comply with all State and Federal environmental laws and rules. In addition, the permittee shall comply with all local burning, fire, zoning, and other applicable ordinances, codes, rules and regulations.

N. Permit Issuance:

This permit is issued in reliance upon the accuracy and completeness of the information set forth in the application. Notwithstanding the tentative nature of this information, the conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23.1-06.

8. State Enforceable Only Conditions (not Federally enforceable)

A. Odor Restrictions:

The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which is more than the limits established in NDAC 33.1-15-16.