Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Red Star Yeast Company, LLC
Facility Location: 950 60th Avenue SW, Cedar Rapids, IA 52404

Name of Permitted Facility: Lesaffre Blending Facility
Facility Location: 1030 60th Avenue SW, Cedar Rapids, IA 52404

Air Quality Operating Permit Number: 10-TV-006R3
Expiration Date: September 30, 2030
Permit Renewal Application Deadline: March 30, 2030

EIQ Number: 92-6919
Facility File Number: 57-01-226-01

Responsible Official
Name: Mathieu Cagnard
Title: Plant Manager
Mailing Address: 950 60th Avenue SW Cedar Rapids, IA 52404
Phone #: (319) 896-2640

Permit Contact Person for the Facility
Name: Scott Groth
Title: EHS Manager
Mailing Address: 950 60th Avenue SW Cedar Rapids, IA 52404
Phone #: (319) 896-2620

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22 and is issued subject to the terms and conditions contained in this permit. These facilities, ADM Corn Processing (Plant No. 57-01-080), Vantage Corn Processing (Plant No. 57-01-246), and Biospringer North America Corporation (Plant No. 57-01-226) are considered one stationary source. Four Title V Permits have been issued for the five facilities. This permit is for Red Star Yeast Company, LLC and Lesaffre Blending Facility. Other permits have been issued for ADM Corn Processing (Permit No. 08-TV-004R1-M002), Vantage Corn Processing (Permit No. 08-TV-007R2) and Biospringer North America Corporation (Permit No. 12-TV-005R2-M001).

For the Director of the Department of Natural Resources

Marnie Stein 10/01/2025

Marnie Stein, Supervisor of Air Operating Permits Section Date

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Abbreviations

acfm .....actual cubic feet per minute
ATI.....authorization to install
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
DNR.....Department of Natural Resources
^{o}F .....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
EP.....emission point
EU .....emission unit
gph .....gallons per hour
gr./dscf .....grains per dry standard cubic foot
H.....Horizontal discharge
IAC.....Iowa Administrative Code
LCPH .....Linn County Public Health
LCO .....Linn County Ordinance
MVAC .....motor vehicle air conditioner
NSPS.....new source performance standard
NAICS .....North American Industry Classification System
ppmv .....parts per million by volume
lb/hr.....pounds per hour
PTO.....permit to operate
scfm.....standard cubic feet per minute
SIC .....Standard Industrial Classification
tpy .....tons per year
USEPA.....United States Environmental Protection Agency
V.....Vertical (without rain cap or with unobstructing rain cap)

Pollutants

PM.....particulate matter
PM_{10} .....particulate matter ten microns or less in diameter
$PM_{2.5}$ .....particulate matter two point five microns or less in diameter
SO_2 .....sulfur dioxide
NO_x .....nitrogen oxides
VOC .....volatile organic compound
CO.....carbon monoxide
HAP .....hazardous air pollutant
SHAP .....single hazardous air pollutant
THAP.....total hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: Red Star Yeast Company, LLC
Facility Name: Lesaffre Blending Facility

Permit Number: 10-TV-006R3

Facility Description: Yeast Manufacturing (NAICS 311999; SIC 2099)

Table 1 - Equipment List – Red Star Yeast Company, LLC

Emission Point #	Emission Unit #	Emission Unit Description	Construction Permit #
1.1	01.1	Trade Fermenter 1	LCPH ATI 5927 / PTO 5586-R1 DNR PSD 03-A-1038-P4
1.2	01.2	Trade Fermenter 2	LCPH ATI 5928 / PTO 5587-R1 DNR PSD 03-A-1039-P4
1.3	01.3	Trade Fermenter 3	LCPH ATI 5929 / PTO 5588-R1 DNR PSD 03-A-1040-P4
1.4	01.4	Trade Fermenter 4	LCPH ATI 5930 / PTO 5589-R1 DNR PSD 03-A-1041-P4
1.5	01.5	Trade Fermenter 5	LCPH ATI 5931 / PTO 5590-R1 DNR PSD 03-A-1042-P4
1.6	01.6	Trade Fermenter 6	LCPH ATI 5932 / PTO 5591-R1 DNR PSD 03-A-1043-P4
1.7	01.7	Trade Fermenter 7	LCPH ATI 5933 / PTO 5592-R1 DNR PSD 03-A-1044-P4
1.8	01.8	Trade Fermenter 8	LCPH ATI 5470 / PTO 6278-R1 DNR PSD 08-A-281-P3
1.9	1.9	Trade Fermenter 9	LCPH ATI 7591 / PTO 7471-R1
1.10	01.10	Trade Fermenter 10	LCPH ATI 6822 / PTO 6755-R2
2.1	02.1	Stock Fermenter 1	LCPH ATI 5934 / PTO 5593-R1 DNR PSD 03-A-1048-P4
3.1	03.1	Pure Culture Fermenter 1	LCPH ATI 5935 / PTO 5594 DNR PSD 03-A-1050-P3
39.10	39.10	Yeast Plant Cooling Tower Cell #10	LCPH ATI 5446 / PTO 5600 DNR PSD 08-A-174P1
39.11	39.11	Yeast Plant Cooling Tower Cell #11	LCPH ATI 5447 / PTO 5601 DNR PSD 080-A-175P1
39.12	39.12	Yeast Plant Cooling Tower Cell #12	LCPH ATI 5448 / PTO 5602 DNR PSD 08-A-176P1
39.13	39.13	Yeast Plant Cooling Tower Cell #13	LCPH ATI 5449 / PTO 6280 DNR PSD 08-A-177P1
39.14	19.14	Yeast Plant Cooling Tower Cell #14	LCPH ATI 5450 / PTO 6383 DNR PSD 08-A-178P1
39.15	39.15	Yeast Plant Cooling Tower Cell #15	LCPH ATI 6823 / PTO 6910-R1
39.16	39.16	Yeast Plant Cooling Tower Cell #16	LCPH ATI 6824 / PTO 6911-R1
39.17	39.17	Yeast Plant Cooling Tower Cell #17	LCPH ATI 7592 / PTO 7472-R1
50	AS.1	Plant Haul Roads	LCPH ATI 5505 / PTO 6238 DNR PSD 08-A-180P1
43.3	43.3	Vitamin Prep	LCPH ATI 6928 / PTO 6912
43.4	43.4	Packaging	LCPH ATI 6929 / PTO 6913
7.1	07.1	Nutritional Yeast Dryer	LCPH ATI 6608 / PTO 6445-R2
7.2	07.2	Nutritional Yeast Dryer	LCPH ATI 6609 / PTO 6446-R2
7.3	07.4	Nutritional Yeast Dryer	LCPH ATI 7113 / PTO 6849
	07.5	Nutritional Yeast Dryer	
18.1	18.1	Dry Ingredient Storage Silo	LCPH ATI 4586 / PTO 5206-R2

Emission Point #	Emission Unit #	Emission Unit Description	Construction Permit #
18.2	18.2	Dry Ingredient Storage Silo	LCPH ATI 6935 / PTO 6931-R1
19.1	19.1	Dry Ingredient Storage Silo	LCPH ATI 5521 / PTO 5595-R1
19.2	19.2	Dry Ingredient Storage Silo	LCPH ATI 5522 / PTO 5596-R1
60.1	60.1	Emergency Generator	SI 152
60.2	60.2	Emergency Generator	LCPH ATI 7531 / PTO 7306

Table 2 - Equipment List - Lesaffre Blending Facility

Emission Point #	Emission Unit #	Emission Unit Description	Construction Permit #
S1.1	S1.1	Ingredient Silo #1	LCPH ATI 6954 / PTO 6905
C2.1	C2.1	Pneumatic Conveyor #1	LCPH ATI 6955 / PTO 6906
B3.1	B3.1	Blender #1	LCPH ATI 6956 / PTO 6907
BD4.1	BD4.1	Bag Dumper	LCPH ATI 6957 / PTO 6908
PL5.1	PL5.1	Packaging Line #1	LCPH ATI 6958 / PTO 6909
FP7.1	FP7.1	Emergency Fire Pump	CI 142
BU8.1	BU8.1	Bulk Bag Unloader #1	LCPH ATI 7698 / PTO 7425
60.3	60.3	Emergency Generator – Server Room	SI 227

Table 3 - Insignificant Activities Equipment List

Insignificant Emission Unit #	Insignificant Activities Emission Unit Description
39.01	Cooling Tower
39.02	Cooling Tower
39.03	Cooling Tower
39.04	Cooling Tower
39.05	Cooling Tower
39.06	Cooling Tower
39.07	Cooling Tower
39.08	Cooling Tower
39.09	Cooling Tower
--	Natural Gas Heaters <10 MMBTU/hr
--	Dry chemical silo
--	Process chemical storage tanks
--	Water treatment chemical generator vent

II. Plant-Wide Conditions

Facility Name: Red Star Yeast Company, LLC
Facility Name: Lesaffre Blending Facility

Permit Number: 10-TV-006R3

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix F.

Permit Duration

The term of this permit is: Five years
Commencing on: October 1, 2025
Ending on: September 30, 2030

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 24.115.

Plant-Wide Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 20 % opacity
Authority for Requirement: LCO Sec. 10-60(a)

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"; LCO Sec. 10-65(a)(2)

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Particulate Matter: No person shall permit, cause, suffer or allow the emission of particulate matter into the atmosphere in any one hour from any emission point from any process equipment at a rate in excess of that specified in Table 10-62-1 for the process weight rate allocated to such emission point. In any case, the emission of

particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas or Table 10-62-1 of [LCO Sec. 10-62], whichever would result in the lowest allowable emission rate.
Authority for Requirement: LCO Sec. 10-62(a)

The emission standards specified in {LCO Sec. 10-62] shall apply and those specified in section 10-61, [LCO Sec. 10-62] and Table 10-62-1 shall not apply to each process of the types listed in the following sections, with the following exception: whenever the compliance status, history of operations, ambient air quality in the vicinity, or the type of control equipment utilized, would warrant maximum control, the air pollution control officer shall enforce 0.1 grains per dry standard cubic foot of exhaust gas, section 10-61, or [LCO Sec. 10-62], whichever would result in the lowest achievable emission rate.
Authority for Requirement: LCO Sec. 10-62(a)(1)

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

Authority for Requirement: 567 IAC 23.3(2)"c"
LCO Sec. 10-66

Regulatory Authority

This facility is located in Linn County, Iowa. Linn County Public Health Department, under agreement with the Iowa Department of Natural Resources (DNR), is the primary regulatory agency in Linn County. This Title V permit is issued by the Iowa Department of Natural Resources, however, required contacts and information submittals referred to in this permit as required by "the Department" should continue to be directed to the Linn County Public Health Department office. This will include such items as stack test notification, stack test results submittal, oral and written excess emission reports, and reports and records required in the Linn County construction permits. Information specifically required by the Title V permit such as the annual EIQ and fees, annual compliance certification, semi-annual monitoring report and any Title V forms submitted for updates, modifications, renewals, etc. must be submitted to the Iowa DNR.
Authority for Requirement: 567 IAC 24.108

40 CFR 60 Subpart IIII Requirements

This facility is subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

See Appendix A, Applicable Federal Standards

Authority for Requirement: 40 CFR 60 Subpart IIII
567 IAC 23.1(2)"yyy"
LCO Sec. 10-62(b)(77)

40 CFR 60 Subpart JJJJ Requirements

This facility is subject to Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

See Appendix A, Applicable Federal Standards

Authority for Requirement: 40 CFR 60 Subpart JJJJ
567 IAC 23.1(2)"zzz"
LCO Sec. 10-62(b)(78)

40 CFR 63 Subpart CCCC Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast.

See Appendix A, Applicable Federal Standards

Authority for Requirement: 40 CFR 63 Subpart CCCC
567 IAC 23.1(4)"cc"
LCO Sec. 10-62(b)(81)

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

See Appendix A, Applicable Federal Standards

Authority for Requirement: 40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"
LCO Sec. 10-62(d)(104)

III. Emission Point-Specific Conditions

Facility Name: Red Star Yeast Company, LLC
Permit Number: 10-TV-006R3

Emission Point ID Number: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 2.1

Table 4 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE Description	CEM
1.1	1.1	Trade Fermenter 1	Yeast Culture, Carbon Substrate	5,990 lb/hr	Process Control	ME01.1 – VOC
1.2	1.2	Trade Fermenter 2		5,990 lb/hr	Process Control	ME01.2 – VOC
1.3	1.3	Trade Fermenter 3		5,990 lb/hr	Process Control	ME01.3 – VOC
1.4	1.4	Trade Fermenter 4		5,990 lb/hr	Process Control	ME01.4 – VOC
1.5	1.5	Trade Fermenter 5		5,990 lb/hr	Process Control	ME01.5 – VOC
1.6	1.6	Trade Fermenter 6		5,990 lb/hr	Process Control	ME01.6 – VOC
1.7	1.7	Trade Fermenter 7		5,990 lb/hr	Process Control	ME01.7 – VOC
1.8	1.8	Trade Fermenter 8		5,990 lb/hr	Process Control	ME01.8 - VOC
2.1	2.1	Stock Fermenter		2,000 lb/hr	Process Control	ME02.1 – VOC

Applicable Requirements

Table 5 - PSD Emission Limits

The following combined emission limits shall not be exceeded for the following emission points:

EP	Pollutant	Emission Limit(s)	Authority for Requirement
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 2.1	VOC Trade Fermentation	225 tpy[1],[2] 142 lb/batch[3]	LCPH ATI 5927 / PTO 5586-R1 DNR PSD 03-A-1038-P4 LCPH ATI 5928 / PTO 5587-R1 DNR PSD 03-A-1039-P4 LCPH ATI 5929 / PTO 5588-R1 DNR PSD 03-A-1040-P4 LCPH ATI 5930 / PTO 5589-R1 DNR PSD 03-A-1041-P4 LCPH ATI 5931 / PTO 5590-R1 DNR PSD 03-A-1042-P4 LCPH ATI 5932 / PTO 5591-R1 DNR PSD 03-A-1043-P4 LCPH ATI 5933 / PTO 5592-R1 DNR PSD 03-A-1044-P4 LCPH ATI 5470 / PTO 6278-R1 DNR PSD 08-A-281-P3 LCPH ATI 5934 / PTO 5593-R1 DNR PSD 03-A-1048-P4
	VOC 1st Generation Fermentation	225 tpy[1,2] 151 lb/batch[3]	
	VOC Stock Fermentation	225 tpy[1,2] 644 lb/batch[3]	
	SHAP	47.35 tpy[1,4]	
	THAP	47.35 tpy[1,5]	

[1] The emission limit is based on a 12-month rolling total.
[2] Limit is for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EUs 01.1-01.8, 02.1, 0.3.1, and nutritional yeast dried in EUs 07.1 and 07.2.
[3] Measured as total VOCs. Limit is a 30-day rolling average. VOC emissions from specialty yeast batches are not included in the 30-day average.

[4] Acetaldehyde or other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.
[5] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.

Table 6 - Other Combined Emission Limits

The following combined emission limits shall not be exceeded for the following emission points:

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
1.1 1.2	PM / PM_{10} Trade Fermentation	1.02 tpy[1,2]	DNR PSD 03-A-1038-P4 DNR PSD 03-A-1039-P4	LCPH ATI 5927 / PTO 5586-R1 LCPH ATI 5928 / PTO 5587-R1
1.3 1.4 1.5 1.6 1.7 1.8	PM / PM_{10} 1st Generation Fermentation	1.02 tpy[1,3]	DNR PSD 03-A-1040-P4 DNR PSD 03-A-1041-P4 DNR PSD 03-A-1042-P4 DNR PSD 03-A-1043-P4 DNR PSD 03-A-1044-P4 DNR PSD 08-A-281-P3 DNR PSD 03-A-1048-P4	LCPH ATI 5929 / PTO 5588-R1 LCPH ATI 5930 / PTO 5589-R1 LCPH ATI 5931 / PTO 5590-R1 LCPH ATI 5932 / PTO 5591-R1 LCPH ATI 5933 / PTO 5592-R1 LCPH ATI 5470 / PTO 6278-R1 LCPH ATI 5934 / PTO 5593-R1

[1] The emission limit is based on a 12-month rolling total.
[2] Limit is for all trade fermentations in EUs 01.1-01.8 combined.
[3] Limit is for all first generation fermentations in EUs 01.1-01.8 combined.

Table 7 - Emission Point Specific NESHAP Emission Limits

The following emission limits shall not be exceeded per emission point:

EP	Pollutant	Trade Fermentation	First Generation Fermentation	Stock Fermentation	Authority for Requirement
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 2.1	Volatile Organic Compounds (VOC)	95 ppm_v [1,2] or 100 ppm_v[1,3]	190 ppm_v[1,2] or 200 ppm_v[1,3]	285 ppm_v[1,2] or 300 ppm_v[1,3]	LCPH ATI 5927 / PTO 5586-R1 DNR PSD 03-A-1038-P4 LCPH ATI 5928 / PTO 5587-R1 DNR PSD 03-A-1039-P4 LCPH ATI 5929 / PTO 5588-R1 DNR PSD 03-A-1040-P4 LCPH ATI 5930 / PTO 5589-R1 DNR PSD 03-A-1041-P4 LCPH ATI 5931 / PTO 5590-R1 DNR PSD 03-A-1042-P4 LCPH ATI 5932 / PTO 5591-R1 DNR PSD 03-A-1043-P4 LCPH ATI 5933 / PTO 5592-R1 DNR PSD 03-A-1044-P4 LCPH ATI 5470 / PTO 6278-R1 DNR PSD 08-A-281-P3 LCPH ATI 5934 / PTO 5593-R1 DNR PSD 03-A-1048-P440 40 CFR §63.2140 567 IAC 23.1(4) "cc"

[1] Measured as propane. This limit does not apply to specialty yeast.

[2] This limit applied when using the Average Option to demonstrate compliance.
[3] This limit applies when using the Batch Option to demonstrate compliance.

Table 8 – Other Emission Point Specific Emission Limits

The following emission limits shall not be exceeded per emission point:

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 2.1	Opacity	40%	567 IAC 23.2(2)"d"	LCPH ATI 5927 / PTO 5586-R1 DNR PSD 03-A-1038-P4 LCPH ATI 5928 / PTO 5587-R1 DNR PSD 03-A-1039-P4 LCPH ATI 5929 / PTO 5588-R1 DNR PSD 03-A-1040-P4 LCPH ATI 5930 / PTO 5589-R1 DNR PSD 03-A-1041-P4 LCPH ATI 5931 / PTO 5590-R1 DNR PSD 03-A-1042-P4 LCPH ATI 5932 / PTO 5591-R1 DNR PSD 03-A-1043-P4 LCPH ATI 5933 / PTO 5592-R1 DNR PSD 03-A-1044-P4 LCPH ATI 5470 / PTO 6278-R1 DNR PSD 08-A-281-P3 LCPH ATI 5934 / PTO 5593-R1 DNR PSD 03-A-1048-P4
		20%	LCO Sec.10-60(a)	
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8	PM[1]	0.043 lb/hr		LCPH ATI 5927 / PTO 5586-R1 DNR PSD 03-A-1038-P4 LCPH ATI 5928 / PTO 5587-R1 DNR PSD 03-A-1039-P4 LCPH ATI 5929 / PTO 5588-R1 DNR PSD 03-A-1040-P4 LCPH ATI 5930 / PTO 5589-R1 DNR PSD 03-A-1041-P4 LCPH ATI 5931 / PTO 5590-R1 DNR PSD 03-A-1042-P4 LCPH ATI 5932 / PTO 5591-R1 DNR PSD 03-A-1043-P4 LCPH ATI 5933 / PTO 5592-R1 DNR PSD 03-A-1044-P4 LCPH ATI 5470 / PTO 6278-R1 DNR PSD 08-A-281-P3
	PM_{10}[1]	0.043 lb/hr		
2.1	PM[2]	0.13 lb/hr; 0.50 tpy[3]		LCPH ATI 5934 / PTO 5593-R1 DNR PSD 03-A-1048-P4
	PM_{10}[2]	0.13 lb/hr; 0.50 tpy[3]		

[1] Trade & 1st Generation Fermentation
[2] Stock Fermentation
[3] Limit is for all stock fermentations in EU02.1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards

A. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in these permits:

Table 9 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
1.1-1.8 2.1	A	General Conditions	--	10-62(d)(1)	§63.1 – §63.15
	CCCC	National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast	Trade, First Generation & Stock Fermentations	10-62(d)(81)	§63.2130 – §63.2192

Authority for Requirement: DNR PSD 03-A-1038-P4; LCPH ATI 5927 / PTO 5586-R1; DNR PSD 03-A-1039-P4; LCPH ATI 5928 / PTO 5587-R1; DNR PSD 03-A-1040-P4; LCPH ATI 5929 / PTO 5588-R1; DNR PSD 03-A-1041-P4; LCPH ATI 5930 / PTO 5589-R1; DNR PSD 03-A-1042-P4; LCPH ATI 5931 / PTO 5590-R1; DNR PSD 03-A-1043-P4; LCPH ATI 5932 / PTO 5591-R1; DNR PSD 03-A-1044-P4; LCPH ATI 5933 / PTO 5592-R1; DNR PSD 08-A-281-P3; LCPH ATI 5470 / PTO 6278-R1; DNR PSD 03-A-1048-P4; LCPH ATI 5934 / PTO 5593-R1

Operating Requirements with Associated Monitorng and Recordkeeping

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The operating limits for these emission units shall be:
   (1) The maximum number of yeast batches produced in all trade fermentations in EUs 1.1-1.8 is limited to 2,964 batches in any 12-month rolling period.
   (2) The maximum number of yeast batches produced in all first generation fermentations in EUs 1.1-1.8 is limited to 390 batches in any 12-month rolling period.
   (3) The maximum number of yeast batches produced in all stock fermentations in EU 2.1 is limited to 364 batches per 12-month period.

B. An airflow monitor must be installed and calibrated to monitor the exhaust flow rate from each emission unit included in Table 4 of this Permit.

C. Pursuant to 40 CFR §63.2163 and §63.2170, the owner or operator shall install and operate a Volatile Organic Compound (VOC) Continuous Emissions Monitoring System (CEMS) to monitor the exhaust concentration of VOC from each emission unit in Table 4 of this Permit (see **Continuous Monitoring Systems** section below). Using the CEMS and airflow monitor data, calculate VOC emissions for each batch in pounds per batch (lb/batch).
   (1) For times CEMS data are not available for a portion of a batch, the owner or operator shall substitute data according to the requirements and limitations outlined in **Continuous Monitoring Systems** section below.

D. Pursuant to 40 CFR §63.2150(d), all equipment associated with these sources shall be operated and maintained in a manner consistent with safety and good operating practices for minimizing emissions. The owner or operator shall record the date and description of any maintenance completed on equipment associated with these sources.
   (1) The requirement to minimize emissions does not require the owner or operator to make further efforts to reduce emissions if levels required by the emission limits in Tables 5-8 of this Permit, or other applicable standard, have been achieved.

E. Pursuant to 40 CFR §63.2150(a)(2), (3), and Table 8 of that subpart, the owner or operator must

demonstrate compliance with the applicable emission limits by following the procedures for the Average Option described in §63.2171(c) or the procedures for the Batch Option described in §63.2171(d). Regardless of the selected compliance method, the owner or operator shall calculate the 12-month rolling period following the requirements of §63.2171(e)(1) and (2).

F. Pursuant to 40 CFR §63.2182, the owner or operator shall maintain the following records:
   (1) *Notifications and reports.* Maintain copies of each notification and report submitted to comply with NESHAP Subpart CCCC. This includes any Notification of Compliance Status (NOCS) and compliance reports submitted.
   (2) *CEMS.* Maintain the records described in 40 CFR §63.2182(c)(1) through (5), as applicable. These include the results of periodic quality assurance and quality control activities (e.g., RATA, etc.).
   (3) *Compliance.* Maintain all records required to demonstrate compliance with either the Average Option or the Batch Option.
   (4) *Fermentation.* Maintain records for each fermentation batch, including a unique batch identification number, the fermentation stage (trade, first generation, etc.), and the unique CEMS equipment identification number.
   (5) *Performance tests.* Maintain records for each performance test completed (if required for any reason).

G. The owner or operator shall calculate and record the following monthly totals:
   (1) The total trade batches and 1st generation batches in EUs 1.1-1.8.
   (2) The total stock batches in EU 2.1.
   (3) The total amount of VOC emissions from all trade, first generation, stock, and pure culture fermentations from EUs 1.1-1.8, 2.1, and 3.1; and nutritional yeast dried from EUs 7.1 and 7.2.
   (4) The total amount of single and combined HAP emissions from all trade, first generation, stock, and pure culture fermentations from EUs 1.1-1.8, 2.1, and 3.1; and nutritional yeast dried from EUs 7.1 and 7.2.

H. The owner or operator shall calculate and record the following 12-month rolling totals:
   (1) The total trade batches and first generation batches in EUs 1.1-1.8.
   (2) The total stock batches in EU 2.1.
   (3) The total amount of VOC emissions from all trade, first generation, stock, and pure culture fermentations from EUs 1.1-1.8, 2.1, and 3.1; and nutritional yeast dried from EUs 7.1 and 7.2.
   (4) The total amount of single and combined HAP emissions from all trade, first generation, stock, and pure culture fermentations from EUs 1.1-1.8, 2.1, and 3.1; and nutritional yeast dried from EUs 7.1 and 7.2.

I. The owner or operator shall monitor and record 'no visible emissions' observations from each emission unit included in Table 4 of this Permit on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

Authority for Requirement: DNR PSD 03-A-1038-P4; LCPH ATI 5927 / PTO 5586-R1; DNR PSD 03-A-1039-P4; LCPH ATI 5928 / PTO 5587-R1; DNR PSD 03-A-1040-P4; LCPH ATI 5929 / PTO 5588-R1; DNR PSD 03-A-1041-P4; LCPH ATI 5930 / PTO 5589-R1; DNR PSD 03-A-1042-P4; LCPH ATI 5931 / PTO 5590-R1; DNR PSD 03-A-1043-P4; LCPH ATI 5932 / PTO 5591-R1; DNR PSD 03-A-1044-P4; LCPH ATI 5933 / PTO 5592-R1; DNR PSD 08-A-281-P3; LCPH ATI 5470 / PTO 6278-R1; DNR PSD 03-A-1048-P4; LCPH ATI 5934 / PTO 5593-R1
40 CFR 63 Subpart CCCC
LCO Sec. 10-62(d)(81)

Table 10 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
1.1	124.7	V	39	90	13,000	DNR PSD 03-A-1038-P4 LCPH ATI 5927 / PTO 5586-R1
1.2	124.7	V	39	90	13,000	DNR PSD 03-A-1039-P4

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
						LCPH ATI 5928 / PTO 5587-R1
1.3	124.7	V	39	90	13,000	DNR PSD 03-A-1040-P4 LCPH ATI 5929 / PTO 5588-R1
1.4	124.7	V	39	90	13,000	DNR PSD 03-A-1041-P4 LCPH ATI 5930 / PTO 5589-R1
1.5	124.7	V	39	90	13,000	DNR PSD 03-A-1042-P4 LCPH ATI 5931 / PTO 5590-R1
1.6	124.7	V	39	90	13,000	DNR PSD 03-A-1043-P4 LCPH ATI 5932 / PTO 5591-R1
1.7	125.9	V	39	90	13,000	DNR PSD 03-A-1044-P4 LCPH ATI 5933 / PTO 5592-R1
1.8	126.0	V	39	90	13,000	DNR PSD 08-A-281-P3 LCPH ATI 5470 / PTO 6278-R1
2.1	124.7	V	20	90	14,000 acfm	DNR PSD 03-A-1048-P4 LCPH ATI 5934 / PTO 5593-R1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Continuous Monitoring Systems
Pursuant to 40 CFR §63.2163, the owner or operator is required to install and certify a CEMS for each emission unit included in Table 4 of this Permit. Each CEMS must generate a single combined response value for VOC concentrations according to the procedures and requirements in Performance Specification 8 (PS8)—Performance Specifications for Volatile Organic Compound CEMS in Stationary Sources (40 CFR Part 60, Appendix B). Each CEMS must be operated according to the procedures and requirements in Procedure 1—Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determination (40 CFR Part 60, Appendix F), with the exception of the following:

I. Relative accuracy test audits (RATA) must be conducted at least once every 12 calendar quarters, in accordance with sections 8 and 11 (as applicable) of PS8. *40 CFR §63.2163(b)(1)*

II. Cylinder gas audits (CGA) or relative accuracy audits (RAA) must be conducted in the calendar quarters during which a RATA is not conducted, but no more than 11 quarters in succession. *40 CFR §63.2163(b)(2)*

III. As necessary, rely on EPA/600/R-12/531 (incorporated by reference, 40 CFR §63.14) instead of citation 2 of Procedure 1 (40 CFR Part 60, Appendix F). *40 CFR §63.2163(b)(3)*

IV. Meet the criteria of PS8, Section 13.2. *40 CFR §63.2163(b)(4)*

Method 25A (40 CFR Part 60, Appendix A-7) must be used as the reference method and each VOC CEMS must be calibrated with propane. The VOC CEMS span must be set at less than 5 times the relevant emission limitation in Table 1 of NESHAP Subpart CCCC (note the EPA considers 1.5 to 2.5 times the relevant VOC emission limitation to be the optimal range).

Each VOC CEMS must be configured to monitor concentrations in the fermenter exhaust at any point prior to dilution of the exhaust stream. CEMS data will be collected at all times during each batch fermentation, except periods of monitoring system malfunctions, required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled

maintenance must be monitored. Pursuant to 40 CFR §63.2170(c) and (d), data recorded during monitoring malfunctions, associated repairs, and required quality assurance and control activities may not be used in data averages or calculations used to report emission levels and/or fulfill a data collection requirement; and any hour during the batch monitoring period are not obtained is a deviation from monitoring requirements and is counted as an hour of monitoring system downtime.

The owner or operator must record the results of all inspection, calibration, and validation checks of each VOC CEMS. Zero (low-level) and high-level calibration drifts must be checked at least once daily and in accordance with the applicable Performance Specification (40 CFR Part 60, Appendix B). Daily drift checks are not required under the conditions specified in 40 CFR §63.2163(j)(1), (2), or (3).

The following data requirements shall apply to all CEMS for non-NSPS emission standards in this permit:

A. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.

B. The batch average VOC emission rate measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least two (2) data points must be collected each hour during a fermentation batch and the entire data set must be used to calculate each batch average.

C. The owner or operator shall not begin any fermentation batch without operating a properly calibrated CEMS to monitor VOC emissions. In the event of a CEMS malfunction, the owner or operator shall collect brew ethanol concentrations using the following methods:
   (1) Brew ethanol concentrations shall be collected for any hour of a fermentation batch experiencing a CEMS malfunction until the end of that batch.
   (2) A minimum of two (2) brew ethanol concentrations shall be collected each hour during a period of CEMS malfunction. Brew ethanol concentrations shall be collected following a method approved by the Department. The owner or operator is <u>not</u> required to follow the brew ethanol data collection procedures outlined in 40 CFR §63.2161, §63.2162, and §63.2164.
   (3) At the completion of a batch experiencing a CEMS malfunction, the owner or operator shall service the CEMS and perform the appropriate quality-assurance quality-control measures to return the CEMS to service. The owner or operator may also swap out the malfunctioning CEMS with a quality-assured quality-controlled backup CEMS. All backup CEMS must be properly maintained and calibrated.

If requested by the Department, the owner/operator shall coordinate the quarterly relative accuracy audits and/or cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.

Authority for Requirement: DNR PSD 03-A-1038-P4; LCPH ATI 5927 / PTO 5586-R1; DNR PSD 03-A-1039-P4; LCPH ATI 5928 / PTO 5587-R1; DNR PSD 03-A-1040-P4; LCPH ATI 5929 / PTO 5588-R1; DNR PSD 03-A-1041-P4; LCPH ATI 5930 / PTO 5589-R1; DNR PSD 03-A-1042-P4; LCPH ATI 5931 / PTO 5590-R1; DNR PSD 03-A-1043-P4; LCPH ATI 5932 / PTO 5591-R1; DNR PSD 03-A-1044-P4; LCPH ATI 5933 / PTO 5592-R1; DNR PSD 08-A-281-P3; LCPH ATI 5470 / PTO 6278-R1; DNR PSD 03-A-1048-P4; LCPH ATI 5934 / PTO 5593-R1
40 CFR 63 Subpart CCCC
LCO Sec. 10-62(d)(81)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Testing

CEMS cylinder gas audit (CGA) and relative accuracy test audit (RATA) requirements within 40 CFR Appendix B (performance specifications) and Appendix F (Quality Assurance Procedures) as specified in 40 CFR §63.2163 satisfy the compliance testing requirements. No additional testing is required.
Authority for Requirement – 567 IAC 24.108(3)

Table 11 - Continuous Emissions Monitoring

Pollutant:	VOC
Continuous Emissions Monitor ID:	ME01.1, ME01.2, ME01.3, ME01.4, ME01.5, ME01.6, ME01.7, ME01.8, ME02.1
Operational Specifications:	40 CFR 60
Ongoing System Calibration/Quality Assurance:	40 CFR 60
Reporting & Recordkeepimg:	40 CFR 60
Authority for Requirement:	DNR PSD 03-A-1038-P4; LCPH ATI 5927 / PTO 5586-R1 DNR PSD 03-A-1039-P4; LCPH ATI 5928 / PTO 5587-R1 DNR PSD 03-A-1040-P4; LCPH ATI 5929 / PTO 5588-R1 DNR PSD 03-A-1041-P4; LCPH ATI 5930 / PTO 5589-R1 DNR PSD 03-A-1042-P4; LCPH ATI 5931 / PTO 5590-R1 DNR PSD 03-A-1043-P4; LCPH ATI 5932 / PTO 5591-R1 DNR PSD 03-A-1044-P4; LCPH ATI 5933 / PTO 5592-R1 DNR PSD 08-A-281-P3; LCPH ATI 5470 / PTO 6278-R1 DNR PSD 03-A-1048-P4; LCPH ATI 5934 / PTO 5593-R1 40 CFR 63 Subpart CCCC 567 IAC 23.1(4)"cc" LCO Sec. 10-62(b)(81)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 1.9, 1.10

Table 12 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE Description	CEM
1.9	1.9	Trade Fermenter 9	Yeast Culture, Carbon Substrate	5,990 lbs/hr	Process Control	ME01.9 – VOC
1.10	1.10	Trade Fermenter 10	Yeast Culture, Carbon Substrate	5,990 lbs/hr	Process Control	ME01.10 – VOC

Applicable Requirements

Table 13 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
1.9 1.10	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 7591 / PTO 7471-R1 LCPH ATI 6822 / PTO 6755-R2
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
	PM/PM_{10}	0.043 lb/hr		

Table 14 - Emission Limits (When used as a Trade Fermenter)

EP	Pollutant	Emission Limit(s)	Authority for Requirement
1.9	VOC	34.35 tpy[1,2]; 95 ppm_v[3,4] or 100 ppm_v[3,5]	LCPH ATI 7591 / PTO 7471-R1
	SHAP	7.21 tpy[6]	
	THAP	7.21 tpy[7]	
1.10	VOC	34.80 tpy[1,8]; 95 ppm_v[3,4] or 100 ppm_v[3,5]	LCPH ATI 6822 / PTO 6755-R2
	SHAP	7.31 tpy[9]	
	THAP	7.31 tpy[10]	

[1] The emission limit is based on a 12-month rolling total.
[2] Limit is for all pure culture, stock, first generation, and trade fermentations, including specialty yeast produced in EU 1.9.
[3] Measured as propane. This limit does not apply to specialty yeast.
[4] This limit applies when using the Average Option to demonstrate compliance.
[5] This limit applies when using the Batch Option to demonstrate compliance.
[6] Acetaldehyde and other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.9.
[7] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.9.
[8] Limit is for all pure culture, stock, first generation, and trade fermentations, including specialty yeast produced in EU 1.10.
[9] Acetaldehyde and other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.10.
[10] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.10.

Table 15 - Emission Limits (When used as a First Generation Fermenter)

EP	Pollutant	Emission Limit(s)	Authority for Requirement
1.9	VOC	34.35 tpy[1,2]; 95 ppm_v[3,4] or 100 ppm_v[3,5]	LCPH ATI 7591 / PTO 7471-R1
	SHAP	7.21 tpy[6]	
	THAP	7.21 tpy[7]	
1.10	VOC	34.80 tpy[1,8]; 95 ppm_v[3,4] or 100 ppm_v[3,5]	LCPH ATI 6822 / PTO 6755-R2
	SHAP	7.31 tpy[9]	
	THAP	7.31 tpy[10]	

[1] The emission limit is based on a 12-month rolling total.
[2] Limit is for all pure culture, stock, first generation, and trade fermentations, including specialty yeast produced in EU 1.9.
[3] Measured as propane. This limit does not apply to specialty yeast.
[4] This limit applies when using the Average Option to demonstrate compliance.
[5] This limit applies when using the Batch Option to demonstrate compliance.
[6] Acetaldehyde and other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.9.
[7] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.9.
[8] Limit is for all pure culture, stock, first generation, and trade fermentations, including specialty yeast produced in EU 1.10.
[9] Acetaldehyde and other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.10.
[10] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate for all pure culture, stock, first generation, and trade fermentations, including specialty yeast, produced in EU 1.10.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards
A. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in these permits:

Table 16 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
1.9 1.10	A	General Conditions	--	10-62(d)(1)	§63.1 – §63.15
	CCCC	National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast	Trade and First Generation	10-62(d)(81)	§63.2130 – §63.2192

Authority for Requirement: LCPH ATI 7591 / PTO 7471-R1; LCPH ATI 6822 / PTO 6755-R2

Operating Requirements with Associated Monitoring and Recordkeeping
All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The operating limits for each emission unit shall be:
(1) The maximum number of yeast batches produced in all trade fermentations in EU 1.9 is limited to 420 batches in any 12-month rolling period.
(2) The maximum number of yeast batches produced in all trade fermentations in EU 1.10 is limited to 420 batches in any 12-month rolling period.
(3) The maximum number of yeast batches produced in all first generation fermentations in EU 1.9 is limited to 60 batches in any 12-month rolling period.

(4) The maximum number of yeast batches produced in all first generation fermentations in EU 1.10 is limited to 60 batches in any 12-month rolling period.

B. An airflow monitor must be installed and calibrated to monitor the exhaust flow rate from EU 1.9.

C. An airflow monitor must be installed and calibrated to monitor the exhaust flow rate from EU 1.10.

D. Pursuant to 40 CFR §63.2163 and §63.2170, the owner or operator shall install and operate a Volatile Organic Compound (VOC) Continuous Emission Monitoring System (CEMS) to monitor the exhaust concentration of VOC from EU 1.9 and EU 1.10 (see Continuous Monitoring Systems (CMS) section of this permit). Using the CEMS and airflow monitor data, calculate VOC emissions for each batch in pounds per batch.
(1) For times CEMS data are not available for a portion of a batch, total VOC emissions from a batch shall be calculated by adding the pounds of VOC from available CEMS data to the pounds of VOC estimated by the owner or operator. Emissions estimated in this manner must follow a method reviewed and approved by the Department.

E. Pursuant to 40 CFR §63.2150(d), all equipment associated with these sources shall be operated and maintained in a manner consistent with safety and good operating practices for minimizing emissions. The owner or operator shall record the date and description of any maintenance completed on equipment associated with these sources.
(1) The requirement to minimize emissions does not require the owner or operator to make further efforts to reduce emissions if levels required by the emission limits in Tables 13-15 of this permit, or other applicable standard, have been achieved.

F. Pursuant to 40 CFR §63.2150(a)(2), (3), and Table 8 of that subpart, the owner or operator must demonstrate compliance with the applicable emission limits by following the procedures for the Average Option described in §63.2171(c) or the procedures for the Batch Option described in §63.2171(d). Regardless of the selected compliance method, the owner or operator shall calculate the 12-month rolling period following the requirements of §63.2171(e)(1) and (2).

G. Pursuant to 40 CFR §63.2182, the owner or operator shall maintain the following records:
(1) *Notifications and reports.* Maintain copies of each notification and report submitted to comply with NESHAP Subpart CCCC. This includes any Notification of Compliance Status (NOCS) and compliance reports submitted.
(2) *CEMS.* Maintain the records described in 40 CFR §63.2182(c)(1) through (5), as applicable. These include the results of periodic quality assurance and quality control activities (e.g., RATA, etc.)
(3) *Compliance.* Maintain all records required to demonstrate compliance with either the Average Option or the Batch Option.
(4) *Fermentation.* Maintain records for each fermentation batch, including a unique batch identification number, the fermentation stage (trade, first generation, etc.), and the unique CEMS equipment identification number.
(5) *Performance tests.* Maintain records for each performance test (if required for any reason).

H. The owner or operator will calculate and record the following monthly totals:
(1) The total trade batches and first generation batches in EU 1.9 and EU 1.10.
(2) The total amount of VOC emissions from all trade and first generation fermentations from EU 1.9 and EU 1.10.
(3) The total amount of single and combined HAP emissions from all trade and first generation fermentations from EU 1.9 and EU 1.10.

I. The owner or operator shall calculate and record the following 12-month rolling totals.
(1) The total trade batches and first generation batches in EU 1.9 and EU 1.10.
(2) The total amount of VOC emissions from all trade and first generation fermentations in EU 1.9 and EU 1.10.
(3) The total amount of single and combined HAP emissions from all trade and first generation fermentations in EU 1.9 and EU 1.10.

J. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

Authority for Requirement: LCPH ATI 7591 / PTO 7471-R1; LCPH ATI 6822 / PTO 6755-R2
40 CFR 63 Subpart CCCC
LCO Sec. 10-62(d)(81)

Table 17 - Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
1.9	124.7	V	39	90 – 100	13,000 – 18,500	LCPH ATI 7591 / PTO 7471-R1
1.10	125.5	V	39	90	13,000	LCPH ATI 6822 / PTO 6755-R2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Continuous Monitoring Systems (CMS)

Pursuant to 40 CFR §63.2163, the owner or operator is required to install and certify a CEMS for EU 1.9 and EU 1.10. This CEMS must generate a single combined response value for VOC concentrations according to the procedures and requirements in Performance Specification 8 (PS8)—Performance Specifications for Volatile Organic Compound CEMS in Stationary Sources (40 CFR Part 60, Appendix B). Each CEMS must be operated according to the procedures and requirements in Procedure 1—Quality Assurance Requirements for Gas Continuous Emission Monitoring Systems Used for Compliance Determination (40 CFR Part 60, Appendix F), with the exception of the following:

I. Relative accuracy test audits (RATA) must be conducted at least once every 12 calendar quarters, in accordance with sections 8 and 11 (as applicable) of PS8. *40 CFR §63.2163(b)(1)*

II. Cylinder gas audits (CGA) or relative accuracy audits (RAA) must be conducted in the calendar quarters during which a RATA is not conducted, but no more than 11 quarters in succession. *40 CFR §63.2163(b)(2)*

III. As necessary, rely on EPA/600/R-12/531 (incorporated by reference, 40 CFR §63.14) instead of citation 2 of Procedure 1 (40 CFR Part 60, Appendix F). *40 CFR §63.2163(b)(3)*

IV. Meet the criteria of PS8, Section 13.2. *40 CFR §63.2163(b)(4)*

Method 25A (40 CFR Part 60, Appendix A-7) must be used as the reference method and each VOC CEMS must be calibrated with propane. The VOC CEMS span must be set at less than 5 times the relevant emission limitation in Table 1 of NESHAP Subpart CCCC (note that EPA considers 1.5 to 2.5 times the relevant VOC emission limitation to be the optimal range).

Each VOC CEMS must be configured to monitor concentrations in the fermenter exhaust at any point prior to dilution of the exhaust stream. CEMS data will be collected at all times during each batch fermentation, except periods of monitoring system malfunctions, required monitoring system quality assurance or quality control

activities (including, as applicable, calibration checks and required zero and span adjustments), and any scheduled maintenance must be monitored. Pursuant to 40 CFR §63.2170(c) and (d), data recorded during monitoring malfunctions, associated repairs, and required quality assurance and control activities may not be used in data averages or calculations used to report emission levels and/or fulfill a data collection requirement, and any hour during the batch monitoring period are not obtained is a deviation from monitoring requirements and is counted as an hour of monitoring system downtime.

The owner or operator must record the results of all inspections, calibration, and validation checks of the VOC CEMS. Zero (low-level) and high-level calibration drifts must be checked at least once daily and in accordance with the applicable Performance Specification (40 CFR Part 60, Appendix B). Daily drift checks are not required under the conditions specified in 40 CFR §63.2163(j)(1), (2), or (3).

The following data requirements shall apply to all CEMS for non-NSPS emission standards in this permit:

A. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission unit except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.

B. The batch average VOC emission rate measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards of this permit. At least two (2) data points must be collected each hour during a fermentation batch and the entire data set must be used to calculate each batch average.

C. The owner or operator shall not begin any fermentation batch without operating a properly calibrated CEMS to monitor VOC emissions. In the event of a CEMS malfunction, the owner or operator shall collect brew ethanol concentrations using the following methods:
   (1) Brew ethanol concentrations shall be collected for any hour of a fermentation batch experiencing a CEMS malfunction until the end of that batch.
   (2) A minimum of two (2) brew ethanol concentrations shall be collected each hour during a period of CEMS malfunction. Brew ethanol concentrations shall be collected following a method approved by the Department. The owner or operator is not required to follow the brew ethanol data collection procedures outlined in 40 CFR §63.2161, §63.2162, and §63.2164.
   (3) At the completion of a batch experiencing a CEMS malfunction, the owner or operator shall service the CEMS and perform the appropriate quality-assurance quality-control measures to return the CEMS to service. The owner or operator may also swap out the malfunctioning CEMS with a quality-assured quality-controlled backup CEMS. All backup CEMS must be properly maintained and calibrated.

If requested by the Department, the owner/operator shall coordinate the quarterly relative accuracy audits and/or cylinder gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.
Authority for Requirement: LCPH ATI 7591 / PTO 7471-R1; LCPH ATI 6822 / PTO 6755-R2
40 CFR 63 Subpart CCCC
LCO Sec. 10-62(d)(81)

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Testing
CEMS cylinder gas audit (CGA) and relative accuracy test audit (RATA) requirements within 40 CFR Appendix B (performance specifications) and Appendix F (Quality Assurance Procedures) as specified in 40 CFR §63.2163 satisfy the compliance testing requirements. No additional testing is required.
Authority for Requirement – 567 IAC 24.108(3)

Table 18 - Continuous Emissions Monitoring

Pollutant:	VOC
Continuous Emissions Monitor ID:	ME1.9, ME1.10

Pollutant:	VOC
Operational Specifications:	40 CFR 60
Ongoing System Calibration/Quality Assurance:	40 CFR 60
Reporting & Recordkeepimg:	40 CFR 60
Authority for Requirement:	LCPH ATI 7591 / PTO 7471-R1 LCPH ATI 6822 / PTO 6755-R2 40 CFR 63 Subpart CCCC 567 IAC 23.1(4)"cc" LCO Sec. 10-62(b)(81)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 3.1

Table 19 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
3.1	3.1	Pure Culture Fermenter 1	Yeast Culture, Carbon Substrate	22 lbs/hr	--	Process Control

Applicable Requirements

Table 20 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
3.1	Opacity	40%	567 IAC 23.2(2)"d"	DNR PSD 03-A-1050-P3
		20%	LCO Sec.10-60(a)	LCPH ATI 5935 / PTO 5594
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	DNR PSD 03-A-1050-P3 LCPH ATI 5935 / PTO 5594
	PM/PM_{10}	0.013 lb/hr; 0.03 tpy[1,2]		
	VOC	0.10 lb/hr; 225 tpy[1,3]		
	SHAP	47.35 tpy[1,4]		
	THAP	47.35 tpy[1,5]		

[1] The emission limit is based on a 12-month rolling total.
[2] Limit is for all pure culture fermentations produced in EU 03.1.
[3] Limit is for all pure culture, stock, first generation and trade fermentations, including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.
[4]Acetaldehyde or other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.
[5] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards

A. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in this permit:

Table 21 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
3.1	A	General Conditions	--	10-62(d)(1)	§63.1 – §63.15
	CCCC	National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast	Trade and First Generation	10-62(d)(81)	§63.2130 – §63.2192

Authority for Requirement: DNR PSD 03-A-1050-P3; LCPH ATI 5935 / PTO 5594

Operating Condition Monitoring & Recordkeeping:
All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. Calculate and record monthly and 12-month rolling totals of the number of pure culture fermentations.
B. Calculate and record the total amount of VOC emissions from all trade, first generation, stock and pure culture fermentations from EUs 01.1-01.8, 02.1, and 03.1, and nutritional yeast dried from EUs 07.1 and 07.2 on a 12-month rolling total basis.
C. Calculate and record the total amount of single and combined HAP emissions from all trade, first generation, stock and pure culture fermentations from EUs 01.1-01.8, 02.1, and 03.1, and nutritional yeast dried from EUs 07.1 and 07.2 on a 12-month rolling total basis.

Authority for Requirement: DNR PSD 03-A-1050-P3; LCPH ATI 5935 / PTO 5594

Table 22 - Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
3.1	75	V	8	90-100	107-213	DNR PSD 03-A-1050-P3 LCPH ATI 5935 / PTO 5594

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 39.10, 39.11, 39.12, 39.13, 39.14

Table 23 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
39.10	39.10	Yeast Plant Cooling Tower Cell #10	Process Cooling Water	161,400 gph	39.10	Drift Eliminator
39.11	39.11	Yeast Plant Cooling Tower Cell #11	Process Cooling Water	161,400 gph	39.11	Drift Eliminator
39.12	39.12	Yeast Plant Cooling Tower Cell #12	Process Cooling Water	161,400 gph	39.12	Drift Eliminator
39.13	39.13	Yeast Plant Cooling Tower Cell #13	Process Cooling Water	161,400 gph	39.13	Drift Eliminator
39.14	39.14	Yeast Plant Cooling Tower Cell #14	Process Cooling Water	161,400 gph	39.14	Drift Eliminator

Applicable Requirements

Table 24 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
39.10 39.11 39.12 39.13 39.14	Opacity	40%	567 IAC 23.2(2)"d"	DNR PSD 08-A-174P1 LCPH ATI 5446 / PTO 5600 DNR PSD 08-A-175P1 LCPH ATI 5447 / PTO 5601 DNR PSD 08-A-176P1 LCPH ATI 5448 / PTO 5602 DNR PSD 08-A-177P1 LCPH ATI 5449 / PTO 6280 DNR PSD 08-A-178P1 LCPH ATI 5450 / PTO 6283
		20%	LCO Sec.10-60(a)	
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
	PM/PM_{10}	0.07 lb/hr; 0.30 tpy		

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

Operating limits for this emission unit shall be:

A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 1950 parts per million by weight (1950 mg/L) for any single sampling event.
B. Chromium based water treatment chemicals shall not be used in this emission unit.

Authority for Requirement: DNR PSD 08-A-174P1; LCPH ATI 5446 / PTO 5600; DNR PSD 08-A-175P1; LCPH ATI 5447 / PTO 5601; DNR PSD 08-A-176P1; LCPH ATI 5448 / PTO 5602; DNR PSD 08-A-177P1; LCPH ATI 5449 / PTO 6280; DNR PSD 08-A-178P1; LCPH ATI 5450 / PTO 6283

Operating Condition Monitoring and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall complete an analysis of the TDS of the water in the cooling tower at least once for each calendar month this emission unit is in operation.
B. Maintain a safety data sheet of all water treatment chemicals used.
C. Maintain records of the manufacturer's design guarantee.

Authority for Requirement: DNR PSD 08-A-174P1; LCPH ATI 5446 / PTO 5600; DNR PSD 08-A-175P1; LCPH ATI 5447 / PTO 5601; DNR PSD 08-A-176P1; LCPH ATI 5448 / PTO 5602; DNR PSD 08-A-177P1; LCPH ATI 5449 / PTO 6280; DNR PSD 08-A-178P1; LCPH ATI 5450 / PTO 6283

Table 25 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
39.10	36.79	V	144	92	293,780	DNR PSD 08-A-174P1 LCPH ATI 5446 / PTO 5600
39.11	36.79	V	144	92	293,780	DNR PSD 08-A-175P1 LCPH ATI 5447 / PTO 5601
39.12	36.79	V	144	92	293,780	DNR PSD 08-A-176P1 LCPH ATI 5448 / PTO 5602
39.13	36.79	V	144	92	293,780	DNR PSD 08-A-177P1 LCPH ATI 5449 / PTO 6280
39.14	36.79	V	144	92	293,780	DNR PSD 08-A-178P1 LCPH ATI 5450 / PTO 6283

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 39.15, 39.16, 39.17

Table 26 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
39.15	39.15	Yeast Plant Cooling Tower Cell #15	Process Cooling Water	205,714 gph	39.15	Drift Eliminator
39.16	39.16	Yeast Plant Cooling Tower Cell #16	Process Cooling Water	205,714 gph	39.16	Drift Eliminator
39.17	39.17	Yeast Plant Cooling Tower Cell #17	Process Cooling Water	322,800 gph	39.17	Drift Eliminator

Applicable Requirements

Table 27 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
39.15 39.16 39.17	Opacity	20%	LCO Sec.10-60(a)	LCPHATI 6823 / PTO 6910-R1 LCPH ATI 6824 / PTO 6911-R1 LCPH ATI 7592 / PTO 7472-R1
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
	PM/PM_{10}	0.09 lb/hr		

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The Total Dissolved Solids (TDS) concentration in the cooling circulating water shall not exceed 1,950 parts per million by weight (1,950 mg/L) for any single sampling event.
   i. The owner or operator shall sample the cooling tower circulating water for TDS at least once per calendar month this emission unit is in operation.

B. Chromium-based or VOC-containing water treatment chemicals shall not be used in this emission unit.
   i. The owner or operator shall maintain a safety data sheet (SDS) of all water treatment chemicals used.

C. The cooling tower drift eliminator shall be maintained according to the manufacturer's specifications and good operating practices.
   i. The owner or operator shall maintain a record of the manufacturer's drift loss guarantee.
   ii. The owner or operator shall record the date and description of all maintenance completed on the cooling tower.

Authority for Requirement: LCPH ATI 6823 / PTO 6910-R1; LCPH ATI 6824 / PTO 6911-R1; LCPH ATI 7592 / PTO 7472-R1

Table 28 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
39.15	34.45	V	144	92	304,400	LCPH ATI 6823 / PTO 6910-R1
39.16	34.45	V	144	92	304,400	LCPH ATI 6824 / PTO 6911-R1
39.17	34.45	V	144	92	304,400	LCPH ATI 7592 / PTO 7472-R1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 50

Table 29 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
50	AS.1	Plant Haul Roads	Silt	--	--	--

Applicable Requirements

Table 30 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
50	Opacity	40% 10%[1]	567 IAC 23.2(2)"d"	DNR PSD 08-A-180P1 LCPH ATI 5498 / PTO 6238
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
		0.10 tpy		
	PM_{10}	0.10 tpy		

[1] BACT Limit

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

A. The haul roads shall be paved prior to facility start up.
B. Truck traffic on the haul road shall not exceed 20 mph. The speed limit shall be posted on the haul road.
C. Any spills on the road shall be cleaned up immediately.
D. Truck traffic emissions on the haul road shall be controlled by sweeping or vacuuming once per day or as often as weather permits.

Authority for Requirement: DNR PSD 08-A-180P1; LCPH ATI 5498 / PTO 6238

Operating Condition Monitoring

All records as required by this permit shall be kept on site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. Record the frequency of sweeping and/or vacuuming performed on the haul roads. If the roads are not swept and/or vacuumed due to weather, a written record must be kept on site outlining the conditions.

Authority for Requirement: DNR PSD 08-A-180P1; LCPH ATI 5498 / PTO 6238

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 43.3, 43.4

Table 31 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
43.3	43.3	Vitamin Prep	Ingredients	3,196 lbs/hr	43.3	Cartridge Filters
43.4	43.4	Packaging	Yeast	2,000 lbs/hr	43.4	Cartridge Filters

Applicable Requirements

Table 32 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
43.3 43.4	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 6928 / PTO 6912 LCPH ATI 6929 / PTO 6913
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
43.3	PM/PM_{10}	0.06 lb/hr		LCPH ATI 6928 / PTO 6912
43.4		0.26 lb/hr		LCPH ATI 6929 / PTO 6913

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the control equipment.
B. The differential pressure across the control equipment shall be maintained between 0.1" and 8.0" w.c. The owner or operator shall monitor and record the differential pressure across the control equipment on a weekly basis.
C. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

Authority for Requirement: LCPH ATI 6928 / PTO 6912; LCPH ATI 6929 / PTO 6913

Table 33 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
43.3	27	V	6	100	700	LCPH ATI 6928 / PTO 6912
43.4	17	V	10	100	3,000	LCPH ATI 6929 / PTO 6913

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 7.1, 7.2

Table 34 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
7.1	7.1	Nutritional Yeast Dryer 1	Trade Fermenter Yeast	675 lbs/hr	7.1	Wet Scrubber
7.2	7.2	Nutritional Yeast Dryer 2	Trade Fermenter Yeast	675 lbs/hr	7.2	Wet Scrubber

Applicable Requirements

Table 35 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
7.1 7.2	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 6608 / PTO 6445-R2 LCPH ATI 6609 / PTO 6446-R2
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
		0.75 lb/hr; 2.63 tpy		
	PM_{10}	0.375 lb/hr; 1.31 tpy		
	VOC	225 tpy[1]		
	SHAP	47.35 tpy[2]		
	THAP	47.35 tpy[3]		

[1] Limit is for all pure culture, stock, first generation and trade fermentations, including specialty yeast produced in EUs 0.1-01.8, 02.1, 0.3.1, and nutritional yeast dried in EUs 07.1 and 07.2.
[2] Acetaldehyde or other HAPs. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.
[3] Total HAPs are assumed to be 21% of VOC emissions. This limit is an aggregate limit for all pure culture, stock, first generation, and trade fermentations including specialty yeast, produced in EUs 01.1-01.8, 02.1, 03.1, and nutritional yeast dried in EUs 07.1 and 07.2.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Device
A wet scrubber shall be installed to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "operating condition monitoring and recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 6608 / PTO 6445-R2; LCPH ATI 6609 / PTO 6446-R2

Operating Limits
A. Each emission unit shall be limited to 7,500 hours per year based on a 12-month rolling total.
B. The scrubber on these units shall be maintained according to the manufacturer's specifications and good operating practices.
C. The recirculation water flow to the scrubbers shall be maintained at a minimum of 55 gpm.
Authority for Requirement: LCPH ATI 6608 / PTO 6445-R2; LCPH ATI 6609 / PTO 6446-R2

Operating Condition Monitoring and Recordkeeping
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall record scrubber water recirculation water flow rate on a weekly basis.
B. The owner or operator shall install a non-resettable hour meter on the dryer.
C. The owner or operator shall record the dryer hours of operation monthly and calculate 12-month rolling total for each month.
D. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
E. The owner or operator shall record maintenance and repairs completed on the control equipment.
F. The owner or operator shall monitor and record monthly and 12-month rolling PM and PM_{10} emission totals to ensure compliance with the annual emission limits established in "Emission Limits" section. This requirement only applies in the event any source test (three 1-hour runs) results in an average emission rate > 0.70 lb/hr PM and/or > 0.349 lb/hr PM_{10}.
G. The owner or operator shall calculate and record the total amount of VOC emissions from the facility on a 12-month rolling total basis.
H. The owner or operator shall calculate and record the total amount of single and combined HAP emissions from the facility on a 12-month rolling total basis.

Authority for Requirement: LCPH ATI 6608 / PTO 6445-R2; LCPH ATI 6609 / PTO 6446-R2

Table 36 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
7.1	59.7	V	36	140	9,330	LCPH ATI 6608 / PTO 6445-R2
7.2	59.7	V	36	140	9,330	LCPH ATI 6609 / PTO 6446-R2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Stack Testing
See Appendix E, Stack Testing Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 7.3

Table 37 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
7.3	7.4	Nutritional Yeast Dryer 4	Trade Fermenter Yeast	675 lbs/hr	7.3	Wet Scrubber
	7.5	Nutritional Yeast Dryer 5	Trade Fermenter Yeast	675 lbs/hr		

Applicable Requirements

Table 38 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
7.3	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 7113 / PTO 6849
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
		1.4 lb/hr		
	PM_{10}	0.7 lb/hr		
	VOC	0.77 lb/hr		

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. EU 7.4 shall be limited to operating 7,500 hours per year based on a 12-month rolling total.
   i. The owner or operator shall install a non-resettable hour meter on EU 7.4.
   ii. The owner or operator shall record the hours of operation monthly and calculate the 12-month rolling total for each month.

B. EU 7.5 shall be limited to operating 7,500 hours per year based on a 12-month rolling total.
   i. The owner or operator shall install a non-resettable hour meter on EU 7.5.
   ii. The owner or operator shall record the hours of operation monthly and calculate the 12-month rolling total for each month.

C. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the control equipment.

D. The recirculation water flow to the scrubber (CE 7.3) shall be maintained between 130 and 200 gallons per minute (gpm). The owner or operator shall monitor and record the recirculation water flow rate (in gpm) to the scrubber on a weekly basis.

E. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

Authority for Requirement: LCPH ATI 7113 / PTO 6849

Table 39 - Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
7.3	70.2	V	52	140	29,500	LCPH ATI 7113 / PTO 6849

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Stack Testing
See Appendix E, Stack Testing Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 18.1, 18.2

Table 40 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
18.1	18.1	Dry Ingredient Storage Silo	Dry Ingredients	1,321 lbs/hr	18.1	Baghouse
18.2	18.2	Dry Ingredient Storage Silo	Dry Ingredients	50,000 lbs/hr	18.2	Baghouse

Applicable Requirements

Table 41 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
18.1 18.2	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 4586 / PTO 5206-R2 LCPH ATI 6935 / PTO 6931-R1
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
18.1	PM/PM_{10}	0.17 lb/hr; 0.02 tpy		LCPH ATI 4586 / PTO 5206-R2
18.2		0.05 lb/hr; 0.01 tpy		LCPH ATI 6935 / PTO 6931-R1

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Equipment (EP 18.1 only)

A baghouse shall be installed to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "operating condition monitoring and recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 4586 / PTO 5206-R2

Operating Limits (EP 18.1 only)

A. This unit shall be limited to a total throughput of 11,575 tons per year based on a 12-month rolling total.
Authority for Requirement: LCPH ATI 4586 / PTO 5206-R2

Operating Condition Monitoring & Recordkeeping (EP 18.1 only)

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. Record the amount of product loaded per year based on a 12-month rolling total
B. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
C. Maintain a written record of the 'no visible emissions' observations and any action resulting from the observations.
D. Record all maintenance and repair completed to the control device.

Authority for Requirement: LCPH ATI 4586 / PTO 5206-R2

Operating Requirements with Associated Monitoring and Recordkeeping (EP 18.2 only)
All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. This unit shall be limited to a total throughput of 11,575 tons per year based on a 12-month rolling total. The owner or operator shall record the amount of product unloaded on a monthly and 12-month rolling total basis.
B. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the control equipment.
C. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

Authority for Requirement: LCPH ATI 6935 / PTO 6931-R1

Table 42 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
18.1	50	H	36 x 36	50	3,919	LCPH ATI 4586 / PTO 5206-R2
18.2	58.5	H	10	Ambient	850	LCPH ATI 6935 / PTO 6931-R1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 19.1, 19.2

Table 43 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
19.1	19.1	Dry Ingredient Storage Silo	Dry Ingredients	1,321 lbs/hr	19.1	Baghouse
19.2	19.2	Dry Ingredient Storage Silo	Dry Ingredients	1,321 lbs/hr	19.2	Baghouse

Applicable Requirements

Table 44 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
19.1 19.2	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 5521 / PTO 5595-R1 LCPH ATI 5522 / PTO 5596-R1
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	
	PM/PM_{10}	0.05 lb/hr; 0.006 tpy		

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control Equipment
A baghouse shall be installed to control particulate emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in "operating condition monitoring and recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.
Authority for Requirement: LCPH ATI 5521 / PTO 5595-R1; LCPH ATI 5522 / PTO 5596-R1

Operating Limits
A. Silo EU19.1 and Silo EU19.2 shall be limited to a total operation of 36 days per year for both silos combined based on a 12-month rolling total.
B. Silo EU19.1 and Silo EU19.2 shall be limited to operating a combined total of no more than 8 hours per day between the hours of 6:00AM and 6:00PM.
C. Pressure drop across the baghouse shall be maintained between 0.5 to 6.0 inches of water.
D. The control equipment on this unit shall be maintained and operated according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 5521 / PTO 5595-R1; LCPH ATI 5522 / PTO 5596-R1

Operating Condition Monitoring & Recordkeeping:
All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. Record the days operated per year based on a 12-month rolling total.
B. Record on a daily basis the time(s) of each silo's operation.
C. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.
D. Maintain a written record of the 'no visible emissions' observations and any action resulting from the observations.
E. Record pressure drop during the loading period on a weekly basis.

F. Record all maintenance and repair completed to the control device
Authority for Requirement: LCPH ATI 5521 / PTO 5595-R1; LCPH ATI 5522 / PTO 5596-R1

Table 45 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
19.1	50	H	36 x 36	50	1,200	LCPH ATI 5521 / PTO 5995
19.2	50	H	36 x 36	50	1,200	LCPH ATI 5522 / PTO 5996

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring
See Appendix D, Opacity Monitoring Summary.
Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 60.1

Table 46 - Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
60.1	60.1	Emergency Generator	Natural Gas	100 BHP 1,020 cf/hr	--	--

Applicable Requirements

Table 47 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
60.1	NO_x	10 g/HP-hr[1]	40 CFR §60.4233(e)	SI 152
	CO	387 g/HP-hr		
	SO_2	500 ppm_v	LCO Sec. 10-65(a)(2)	
	Opacity	20%	LCO Sec. 10-60(a)	

[1] The emission standard is in terms of NO_x + HC.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards

A. New Source Performance Standards (NSPS):
The following subparts apply to the emission unit(s) in this permit:

Table 48 - Applicable NSPS Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
60.1	A	General Conditions	--	10-62(b)	§60.1 – §60.19
	JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	New Emergency Engine	10-62(b)(78)	§60.4230 - §60.4248

Authority for Requirement: 567 IAC 23.1(2)"zzz"; Registration Permit SI 152

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in this permit:

Table 49 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
60.1	ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	New Emergency Engine 25<HP<130	10-62(d)(104)	§63.6580 - §63.6675

Authority for Requirement: 567 IAC 23.1(4)"cz"; Registration Permit SI 152

Below are the specific requirements outlined in the Stationary Spark Ignition Internal Combustion Engines (Less than 400 Brake Horsepower) Registration Permit for EP60.1. For a full explanation of all requirements and to view NSPS Subpart JJJJ in its entirety, please refer to the web link in Appendix A – Applicable Federal Standards.

Summary of Compliance Requirements for Owners and Operators

A. Engines subject to Subpart JJJJ are required to meet emission standards. The standards are listed above. The engine must be operated and maintained to meet the applicable emission standards over the life of the engine.

Authority for Requirement: Registration Permit SI 152

Engine Certification Requirements

A. Other groups of engines may be certified by the manufacturer to comply with the emission standards.

Authority for Requirement: Registration Permit SI 152

Requirements for certified SI engines

A. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of required maintenance.
B. Owners and operators must keep a record from the manufacturer that the engine meets the emission standards.
C. Owners and operators of SI engines that are not required to be certified may purchase an engine that is certified by the manufacturer to comply with the emission standards. The engine must be maintained according to the manufacturer's written instructions and records of required maintenance must be kept.
D. Engines that are required to be certified that are not operated and maintained according to manufacturer's written instructions are considered to be non-certified engines. Owners and operators of such a non-certified SI engine must keep a maintenance plan and records of conducted maintenance and must maintain and operate the engine in a manner consistent with good air pollution control practice to minimize emissions. An initial performance test is required if the engine is rated at 100 HP or greater.

Authority for Requirement: Registration Permit SI 152

Emergency Engine Requirements for Owners and Operators

A. Owners and operators of an emergency SI engine that is less than 130 bhp and does not meet the applicable standards for a non-emergency engine must install a non-resettable hour meter upon start-up.
B. The SI engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours per year. There is no time limit on use for emergency situations.
C. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g., supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
D. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
E. Owners and operators of natural gas SI engines may use propane as an alternative fuel for up to 100 hours per year during emergency operations.

Authority for Requirement: Registration Permit SI 152

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 60.2

Table 50 - Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
60.2	60.2	Emergency Generator	Diesel	1000 kW 70 gal/hr	--	--

Applicable Requirements

Table 51 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
60.2	PM (Federal)	See Table 53	LCO Sec. 10-62(b)(77)	LCPH ATI 7531 / PTO 7306
	PM (State)	0.6 lb/MMBtu	LCO Sec. 10-61(b)(1)	
	Opacity	20%	LCO Sec. 10-60(a)	
	SO_2	See Table 53	LCO Sec. 10-62(b)(77)	
		1.5 lb/MMBtu	LCO Sec. 10-65(a)(1)(b)	
		$0.5\%_w$	LCO Sec. 10-65(a)(1)(c)	
	NO_x	See Table 53	LCO Sec. 10-62(b)(77)	
	CO	See Table 53	LCO Sec. 10-62(b)(77)	

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards

A. New Source Performance Standards (NSPS):
The following subparts apply to the emission unit(s) in this permit:

Table 52 - Applicable NSPS Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
60.2	A	General Conditions	--	10-62(b)	§60.1 – §60.19
	IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	New Emergency Engine	10-62(b)(77)	§60.4200 - §60.4219

i. In accordance with §60.4211(c), the engine must be certified by its manufacturer to comply with the emissions standards for emergency engines from §60.4205(b) and §60.4202(a)(2). The emission standards that the engine must be certified by the manufacturer to meet are:

Table 53 - Emission Standards

Pollutant	Emission Standard	Basis
Particulate Matter (PM)	0.20 grams/kW-hr	§1039 Appendix I Table 2
NMHC[1] + NOx	6.4 grams/kW-hr	§1039 Appendix I Table 2
Carbon Monoxide (CO)	3.5 grams/kW-hr	§1039 Appendix I Table 2
Opacity – acceleration mode	20%	§1039.105(b)(1)
Opacity – lugging mode	15%	§1039.105(b)(2)

Opacity – peaks in acceleration or lugging modes	50%	§1039.105(b)(3)

[1] Non-methane hydrocarbons (NMHC).

ii. In accordance with §60.4211(c), the owner or operator must comply with the required NSPS emissions standards by purchasing an engine certified by its manufacturer to meet the applicable emission standards for the same model year and engine power. The engine must be installed and configured to the manufacturer's specifications. Provided these requirements are satisfied, no further demonstration of compliance with the emission standards from §60.4205(b) and §60.4202(a)(2) is required. However, if the engine is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, a compliance demonstration is required in accordance with §60.4211(g).

Authority for Requirement: 567 IAC 23.1(2)"yyy"; LCPH ATI 7531 / PTO 7306

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in this permit:

Table 54 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
60.2	ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	New Emergency Engine	10-62(d)(104)	§63.6580 - §63.6675

The engine is a new reciprocating internal combustion engine located at a major source of HAP, and is rated more than 500 HP. In accordance with §63.6590(b), the engine does not have to meet the requirements of Part 63 subpart ZZZZ and subpart A except for the initial notification requirements of §63.6645(f).

Authority for Requirement: 567 IAC 23.1(4)"cz"; LCPH ATI 7531 / PTO 7306

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. This engine is limited to operating a maximum of 500 hours in any rolling 12-month period.
B. The following limitations apply:
   i. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §60.4219 and in accordance with §60.4211(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition 5.A. is not exceeded. In accordance with §60.4211(f)(2), the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.
   ii. In accordance with §60.4211(f)(3), the engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used for peak shaving or non-emergency demand response or to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.
C. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
D. The owner or operator shall maintain the following monthly records:
   i. the number of hours that the engine operated for maintenance checks and readiness testing;
   ii. the number of hours that the engine operated for allowed non-emergency operations;
   iii. the total number of hours that the engine operated; and

iv. the rolling 12-month total amount of the number of hours that the engine operated.

E. The owner or operator shall maintain the following annual records:
   i. the number of hours that the engine operated for maintenance checks and readiness testing; and
   ii. the number of hours that the engine operated for allowed non-emergency operations.
   iii. the total number of hours that the engine operated for maintenance checks, readiness testing, and allowed non-emergency operations.

F. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR §1090.305 for nonroad diesel fuel:

Table 55 - Nonroad Diesel Fuel Specifications

Parameter	Limit
Sulfur (S) content	15 ppm (0.0015%) by weight
Minimum cetane index **or** Maximum aromatic content	40 35% (by volume)

The owner or operator of the engine shall comply with these requirements listed above by one of the following methods:
   i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR §1090.305(b);
   ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
   iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

G. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in §60.4211(g).

H. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer's emission-related written instructions. The owner or operator may only change emission-related engine settings that are permitted by the manufacturer.

I. In accordance with §63.6590(b), the owner or operator shall comply with the initial notification requirements of §63.6645(f).

Table 56 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
60.2	10.97	H	12	550	9,534	LCPH ATI 7531 / PTO 7306

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒
Authority for Requirement: 567 IAC 24.108(3)

Facility Name: Lesaffre Blending Facility

Emission Point ID Number: S1.1, C2.1, B3.1, BD4.1, PL5.1, BU8.1

Table 57 - Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
S1.1	S1.1	Dry Ingredient Silo	Dry Ingredients	15 ton/hr	S1.1	Baghouse
C2.1	C2.1	Pneumatic Conveyor #1	Dry Ingredients	7.8 ton/hr	C2.1	Baghouse
B3.1	B3.1	Blender #1	Dry Ingredients	1 ton/hr	B3.1	Baghouse
BD4.1	BD4.1	Bag Dumper #1	Dry Ingredients	1 ton/hr	BD4.1	Baghouse
PL5.1	PL5.1	Packaging Line #1	Dry Ingredients	1 ton/hr	PL5.1	Baghouse
BU8.1	BU8.1	Bulk Bag Unloader #1	Dry Ingredients	0.4 ton/hr	--	--

Applicable Requirements

Table 58 - Emission Limits

The emissions from each emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
S1.1 C2.1	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 6954 / PTO 6905 LCPH ATI 6955 / PTO 6906
B3.1 BD4.1 PL5.1 BU8.1	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCO Sec. 10-62(a)(1)	LCPH ATI 6956 / PTO 6907 LCPH ATI 6957 / PTO 6908 LCPH ATI 6958 / PTO 6909 LCPH ATI 7698 / PTO 7425
S1.1 C2.1 B3.1 BD4.1 PL5.1	PM/PM_{10}	0.01 gr/dscf		LCPH ATI 6954 / PTO 6905 LCPH ATI 6955 / PTO 6906 LCPH ATI 6956 / PTO 6907 LCPH ATI 6957 / PTO 6908 LCPH ATI 6958 / PTO 6909

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Requirements with Associated Monitoring and Recordkeeping (EPs S1.1, C2.1, B3.1, BD4.1, and PL5.1 only)

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The control equipment shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the control equipment.
B. The owner or operator shall monitor and record 'no visible emissions' observations on a weekly basis. An exceedance of 'no visible emissions' will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken.

Authority for Requirement: LCPH ATI 6954 / PTO 6905; LCPH ATI 6955 / PTO 6906; LCPH ATI 6956 / PTO 6907; LCPH ATI 6957 / PTO 6908; LCPH ATI 6958 / PTO 6909

Operating Requirements with Associated Monitoring and Recordkeeping (EP BU8.1 only)

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The owner or operator shall maintain the Bulk Bag Unloader (BU8.1) according to the manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the unit.

Authority for Requirement: LCPH ATI 7698 / PTO 7425

Table 59 - Emission Point Characteristics

These emission points shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
S1.1	50	H	6	Ambient	620-1,000	LCPH ATI 6954 / PTO 6905
C2.1	55	H	6	Ambient	1,400	LCPH ATI 6955 / PTO 6906
B3.1	70	H	4	70	350	LCPH ATI 6956 / PTO 6907
BD4.1	25	V	4	70	400	LCPH ATI 6957 / PTO 6908
PL5.1	36	H	10	70	3,000	LCPH ATI 6958 / PTO 6909
BU8.1	Indoor Vent				400	LCPH ATI 7698 / PTO 7425

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity Monitoring

See Appendix D, Opacity Monitoring Summary.

Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☒[1] **No** ☐

[1] See Appendix C, Facility O&M Plans, for the applicable requirements. **(EPs C2.1 and PL5.1 only)**

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: FP7.1

Table 60 - Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
FP7.1	FP7.1	Emergency Fire Pump	Diesel	183 BHP 9.6 gallons/hour	--	--

Applicable Requirements

Table 61 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
FP7.1	NMHC[1] + NO_x	4.0 grams/kW-hr (3.0 grams/HP-hr)	40 CFR §60.4205(c)	CI 142
	CO	3.5 grams/kW-hr (2.6 grams/HP-hr)		
	PM	0.20 grams/kW-hr (0.15 grams/HP-hr)		
	SO_2	1.5 lb/MMBtu	LCO Sec. 10-65(a)(1)(b)	
	Opacity	20%	LCO Sec. 10-60(a)	

[1] Non-methane hydrocarbons (NMHC).

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards

A. New Source Performance Standards (NSPS):
The following subparts apply to the emission unit(s) in this permit:

Table 62 - Applicable NSPS Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
FP7.1	A	General Conditions	--	10-62(b)	§60.1 – §60.19
	IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	New Fire Pump	10-62(b)(77)	§60.4200 - §60.4219

Authority for Requirement: 567 IAC 23.1(2)"yyy"; Registration Permit CI 142

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in this permit:

Table 63 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
FP7.1	ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	New Fire Pump	10-62(d)(104)	§63.6580 - §63.6675

Authority for Requirement: 567 IAC 23.1(4)"cz"; Registration Permit CI 142

Below are the specific requirements outlined in the Stationary Compression Ignition Internal Combustion Engines (Less than 400 Brake Horsepower) Registration Permit for EPFP7.1. For a full explanation of all requirements and to view NSPS Subpart IIII in its entirety, please refer to the web link in Appendix A – Applicable Federal Standards.

Emission Standards for Owners and Operators

A. Beginning with the model years in table 3 of subpart IIII, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to subpart IIII, for all pollutants, for the same model year and NFPA nameplate power.

Authority for Requirement: Registration Permit CI 142

Fuel Requirements for Owners and Operators

A. Beginning October 1, 2010, engines must use a fuel that meets the following: 1) a maximum sulfur content of 15 ppm and 2) either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.

Authority for Requirement: Registration Permit CI 142

Emergency Engine Requirements for Owners and Operators

A. Owners and operators of an emergency CI engine must install a non-resettable hour meter prior to start-up of the engine.
B. The engine may be operated for the purpose of maintenance checks and readiness testing a maximum of 100 hours/year. There is no time limit on use for emergency situations.
C. Operation other than for emergency operation and maintenance checks and readiness testing as permitted is prohibited
D. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the time of operation of the engine and the reason the engine was in operation.

Authority for Requirement: Registration Permit CI 142

Summary of Compliance Requirements for Owners and Operators

A. Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §60.4205 over the entire life of the engine.
B. Owners and operators of CI fire pump engines that are manufactured on or after the model years specified in Table 3 to subpart IIII must comply with the emission standards above by purchasing an engine certified to the applicable emission standards for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications except as permitted in paragraph (g) of §60.4211.

Authority for Requirement: Registration Permit CI 142

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: 60.3

Table 64 - Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
60.3	60.3	Emergency Generator	Natural Gas	47 BHP	--	--

Applicable Requirements

Table 65 - Emission Limits

The emissions from this emission point shall not exceed the levels specified below.

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
60.3	NO_x	10 g/HP-hr[1]	40 CFR §60.4233(e)	SI 227
	CO	387 g/HP-hr		
	SO_2	500 ppm_v	LCO Sec. 10-65(a)(2)	
	Opacity	20%	LCO Sec. 10-60(a)	

[1] The emission standard is in terms of NO_x + HC.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Federal Standards

A. New Source Performance Standards (NSPS):
The following subparts apply to the emission unit(s) in this permit:

Table 66 - Applicable NSPS Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
60.3	A	General Conditions	--	10-62(b)	§60.1 – §60.19
	JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	New Emergency Engine	10-62(b)(78)	§60.4230 - §60.4248

Authority for Requirement: 567 IAC 23.1(2)"zzz"; Registration Permit SI 227

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):
The following subparts apply to the emission unit(s) in this permit:

Table 67 - Applicable NESHAP Standards

EU ID	Subpart	Title	Type	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
60.3	ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	New Emergency Engine 25<HP<130	10-62(d)(104)	§63.6580 - §63.6675

Authority for Requirement: 567 IAC 23.1(4)"cz"; Registration Permit SI 227

Below are the specific requirements outlined in the Stationary Spark Ignition Internal Combustion Engines (Less than 400 Brake Horsepower) Registration Permit for EP60.3. For a full explanation of all requirements and to view NSPS Subpart JJJJ in its entirety, please refer to the web link in Appendix A – Applicable Federal Standards.

Operating Requirements with Associated Monitoring and Recordkeeping

All records as required by this permit shall be available on-site for a minimum of five years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

General Requirements

A. Pursuant to 40 CFR §60.4233, stationary spark ignition (SI) engines are required to meet the emission standards listed in Table 65 of this permit. The engine must be installed and configured according to the manufacturer's specifications and must be operated and maintained to meet the applicable emission standards over the life of the engine.
   1. Non-emergency SI engines > 25 bhp and < 100 bhp and manufactured on or after July 1, 2008 (except as specified in Condition 4.A(1) above) must meet the emission limits specified in Table 3 of Attachment A (40 CFR §60.4233(d)).

B. Owners and operators of SI engines that are not required to be certified must keep a maintenance plan and records of conducted maintenance; maintain and operate the engine in a manner consistent with good air pollution control practice to minimize emissions; and, for SI engines ≥ 100 bhp, conduct an initial performance test within 1 year of startup. Alternatively, you may purchase an engine that is certified by the manufacturer to comply with the emission standards (and comply with the *Certification Requirements* below).

C. Owners and operators must keep documentation that the SI engine meets the emission standards of NSPS Subpart JJJJ. For owners and operators of certified engines, compliance with Condition 4.G satisfies this requirement.

Certification Requirements

D. The following groups of SI engines must be certified by the manufacturer to comply with the emission standards in NSPS Subpart JJJJ:
   1. SI engines with a maximum engine power less than 25 bhp;
   2. SI engines that use gasoline and have a maximum engine power greater than 25 bhp; and
   3. SI engines that use LPG, are rich burn engines, and have a maximum engine power greater than 25 bhp.

E. Other groups of engines may be certified by the manufacturer to comply with the emission standards in NSPS Subpart JJJJ.

F. Owners and operators of SI engines that are required to be certified and who operate and maintain the engine according to the manufacturer's written instructions must keep records of maintenance performed.

G. Owners and operators of a certified SI engine must maintain a record from the manufacturer that the engine meets the emission standards.

H. SI engines that are required to be certified but are not operated and maintained according to the manufacturer's written instructions are considered to be non-certified engines. Owners and operators of such non-certified engines must:
   1. Keep a maintenance plan and records of conducted maintenance;
   2. Must maintain and operate the engine in a manner consistent with good air pollution control practice to minimize emissions; and
   3. For SI engines ≥ 100 bhp, complete an initial performance test within 1 year of startup.

Emergency Engine Requirements

I. Owners and operators of an emergency SI engine that is less than 130 bhp and does not meet the applicable standards for a non-emergency engine must install a non-resettable hour meter upon start-up.

J. The SI engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours per year. There is no time limit on use for emergency situations[1].

[1] Use the Engine Operation Log attached to SI 227 (or an equivalent form which captures all information necessary to comply with this NSPS requirement to record this information.

K. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used to generate income for the facility (e.g., supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing.
L. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the date and time of operation of the engine and the reason the engine was in operation.
M. Owners and operators of natural gas SI engines may use propane as an alternative fuel for up to 100 hours per year during emergency operations.

Authority for Requirement: Registration Permit SI 227

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code (IAC) and the Linn County Code of Ordinances (LCO) Chapter 10 – Environment, Article III, Sec. 10-57. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix F.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 24.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 24.105(2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 24.108(1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 24.108(14)*
5. It shall not be a defense for a 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 conditions of the permit. *567 IAC 24.108(9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 24.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—24.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—24.105(455B). *567 IAC 24.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 24.105(2). *567 IAC 24.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 24.107(4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 24.108(15)"e"*

G5. Semi-Annual Monitoring Report
By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 24.108 (5)*

G6. Annual Fee
1. The permittee is required under subrule 567 IAC 24.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 24.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 24.108 (15)"b"* and LCO Sec. 10-75

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request 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 also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 24.108 (9)"e"* and LCO Sec. 10-71 and 10-72

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 21.8(1)* and LCO Sec. 10-67(b)

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

a. The date, place and time of sampling or measurements
b. The date the analyses were performed.
c. The company or entity that performed the analyses.
d. The analytical techniques or methods used.
e. The results of such analyses; and
f. The operating conditions as existing at the time of sampling or measurement.
g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.
b. Maintain a log at the permitted facility of the scenario under which it is operating.
c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 24.108(4), 567 IAC 24.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 24;
b. Compliance test methods specified in 567 Chapter 21; or
c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or
b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)* and LCO Sec. 10-69(1)

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 24.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall

be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 21.7(1)-567 IAC 21.7(4)* and LCO Sec. 10-67

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 24.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4) This notification must be made to Linn County Air Quality Branch, in lieu of the department, upon adoption of the NSPS or NESHAP into Chapter 10.*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 24.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—24.140(455B) through 567 - 24.144(455B));.

e. The changes comply with all applicable requirements.

f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 24.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 24.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 24.110(1). *567 IAC 24.110(3)*

4. The permit shield provided in subrule 24.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 24.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 24.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification under rule 567 - 24.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

ii. The permittee's suggested draft permit;

iii. Certification by a responsible official, pursuant to 567 IAC 24.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 24.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 24.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 24, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 24.111-567 IAC 24.113*

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1) and LCO Sec. 10-58*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (*567 IAC 23.1(3)"a");* training fires and controlled burning of a demolished building *(567 IAC 23.2).*

G21. Open Burning
The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*
G22. Acid Rain (Title IV) Emissions Allowances
The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 24.108(7)*
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*
G24. Permit Reopenings
1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. 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 stay any permit condition. *567 IAC 24.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required 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 have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 24.108(17)"a", 567 IAC 24.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 24.114*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 24.114*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 24.114*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 24.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 24.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 24.111(1). *567 IAC 24.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Linn County Public Health
Air Quality Branch
1020 6th St. SE
Cedar Rapids, IA 52401
(319) 892-6000

567 IAC 21.10(7)"a", 567 IAC 21.10(9) and LCO Sec. 10-70

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 313-8325

Reports or notifications to the Linn County local programs shall be directed to the supervisor at the Linn County local program. Current address and phone number is:

Linn County Public Health
Air Quality Branch
1020 6th Street SE
Cedar Rapids, IA 52401
(319) 892-6000

V. APPENDIX A – Applicable Federal Standards

40 CFR 60 Subpart A – *General Provisions*

40 CFR 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

40 CFR 60 Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*

A listing of all the promulgated NSPS rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links and a link to each NSPS can be found at the link below:
https://www.epa.gov/caa-permitting/air-technology-standards-region-7

40 CFR 63 Subpart A – *General Provisions*

40 CFR 63 Subpart CCCC - *National Emission Standards for Hazardous Air Pollutants: Manufacturing of Nutritional Yeast*

40 CFR 63 Subpart ZZZZ - *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

A listing of all the promulgated MACT rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links and a link to each NSPS can be found at the link below:
https://www.epa.gov/caa-permitting/air-technology-standards-region-7

V. APPENDIX B – CAM Plans Summary

There are no emission units subject to a CAM plan in this renewal permit.

V. APPENDIX C – Facility O&M Plans Summary

The following emission units are subject to a facility O&M plan:

Table 68 - Facility O&M Plans Summary

EP	EU ID	EU Description
C2.1	C2.1	Pneumatic Conveyor #1
PL5.1	PL5.1	Packaging Line #1

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provide documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with these emission points.
Authority for Requirement: 567 IAC 24.108(3)

V. APPENDIX D – Opacity Monitoring Summary

Opacity Monitoring
The facility shall check the opacity weekly during a period when the emission unit(s) associated with the emission point listed in Opacity Monitoring Tables 1 or 2 is operating at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required.

If an opacity >20 % is observed from an emission point listed in Opacity Monitoring Table 1, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Table 69 - Opacity Monitoring Table 1

Emission Point												
1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	1.10	2.1	3.1	39.15
39.16	39.17	43.3	43.4	7.1	7.2	7.3	S1.1	C2.1	B3.1	BD4.1	PL5.1	BU8.1

If an opacity >10 % is observed from an emission point listed in Opacity Monitoring Table 2, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Table 70 - Opacity Monitoring Table 2

Emission Point				
39.10	39.11	39.12	39.13	39.14

Authority for Requirement: 567 IAC 24.108(14)

V. APPENDIX E – Stack Testing Summary

Table 71 - Stack Testing Summary

EP	EU Description	Pollutant	Compliance Methodology	Completion Deadline	Test Method
7.1	Nutritional Yeast Dryer	PM-State	Stack Test	September 30, 2028	40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202
		PM_{10}	Stack Test	September 30, 2028	40 CFR 51, Appendix M, 201A with 202
7.2	Nutritional Yeast Dryer	PM-State	Stack Test	September 30, 2028	40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202
		PM_{10}	Stack Test	September 30, 2028	40 CFR 51, Appendix M, 201A with 202
7.3	Nutritional Yeast Dryer	PM-State	Stack Test	September 30, 2028	40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202
		PM_{10}	Stack Test	September 30, 2028	40 CFR 51, Appendix M, 201A with 202

Authority for Requirement: 567 IAC 24.108(3)

V. APPENDIX F – 567 IAC Crosswalk

Table 72. Crosswalk Chapters List

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
20	20 (Reserved)	Scope of Title – Definitions	N/A	**Definitions moved** to Ch. 21, 22, & 23 **Rescinded** Ch. 20 (Reserved)
21	21	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	**Kept and Combined** with rules from Ch. 24, 25, 26, & 29.
22	22	Controlling Pollution-Permits	Controlling Air Pollution – Construction Permitting	**Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS) **Moved operating permit rules** to Ch. 24
22.100 – 22.300(12)	(New) 24	N/A	Operating Permits	**Moved operating permit rules** from Ch. 22 to Ch. 24
23	23	Emission Standards	Air Emission Standards	**Kept**
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21 **Moved TV rules** here (to Ch. 24)
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21 **Rescinded** Ch. 25 (Reserved)
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21 **Rescinded** Ch. 26 (Reserved)
27	27	Local Program Acceptance	Local Program Acceptance	**Kept**
28	22	NAAQS	N/A	**Moved rules and combined** with Ch. 22 **Rescinded** Ch. 28 (Reserved)
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21 **Rescinded** Ch. 29 (Reserved)
30	30	Fees	Fees	**Kept**
31	31	Nonattainment Areas	Nonattainment New Source Review	**Kept**

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
32	N/A	AFO Field Study	N/A	**Rescinded** Ch. 32 (Reserved)
33	33	Special regulations and construction permit requirements for major stationary sources—Prevention of Significant Deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of Significant Deterioration (PSD)	**Kept**
34	N/A	Emission Trading-CAIR-CAMR	N/A	**Rescinded** Ch. 34 (Reserved)
35	N/A	Grant Assistance Programs	N/A	**Rescinded** Ch 35 (Reserved)

Table 73. Crosswalk Rules List

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
Chapter 20				
20	20 (Reserved)	Scope of Title - Definitions	N/A	**Definitions moved** to Ch. 21, 22 and 23 **Rescinded** Ch. 20. (Reserved)
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	
Chapter 21				
21	**21**	**Compliance**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Kept and combined** with rules from Chapters 24, 25, 26, and 29.
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has or is occurring	Evidence used in establishing that a violation has occurred or is occurring	21.5(2) Reserved, some language updated

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
21.6	21.6	Temporary electricity generation for disaster situations	Temporary electricity generation for disaster situations	Minor language updated
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table

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Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Chapter 22				
22	**22**	**Controlling Pollution-Permits**	**Controlling Air Pollution - Construction Permitting**	**Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS). **Moved operating permit rules** to Chapter 24.
22.1	22.1	Permits required for new or existing stationary sources	Definitions and permit requirements for new or existing stationary sources	Added definitions from Ch. 20, some language updated
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)	Major stationary sources located in areas designated attainment or unclassified (PSD)	
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas designated Nonattainment	
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed

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22.10	22.10	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed
22.100 - 22.300(12)	**(New) 24**	**N/A**	**Operating Permits**	**Moved operating permit rules** from Ch. 22 to Ch. 24.
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit requirements	Applicability of Title V operating permit requirements	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates
22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates

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22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off-permit revisions)	Changes allowed without a Title V permit revision (off-permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program—definitions	Acid rain program—definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications—requirement to apply	Acid rain applications—requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.130	24.130	Acid rain permit application shield and binding effect of permit application	Acid rain permit application shield and binding effect of permit application	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.131	24.131	Acid rain compliance plan and compliance options—general	Acid rain compliance plan and compliance options—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text
22.136	24.136	Acid rain permit issuance procedures—completeness	Acid rain permit issuance procedures—completeness	Moved from Ch. 22, no changes to rule text
22.137	24.137	Acid rain permit issuance procedures—statement of basis	Acid rain permit issuance procedures—statement of basis	Moved from Ch. 22, no changes to rule text
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification—annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification—units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
Chapter 23				
23	**23**	**Emission Standards**	**Air Emission Standards**	**Kept**
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the "bubble concept")	Reserved	Removed
Chapter 24				
24	**(New) 21**	**Excess Emissions**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Moved operating permit rules** here (to Ch. 24)**.**
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
Chapter 25				
25	**(New) 21**	**Emissions Measurement**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 25. (Reserved)
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
Chapter 26				
26	**(New) 21**	**Emergency Air Pollution Episodes**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 26. (Reserved)
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
Chapter 27				
27	**27**	**Local Program Acceptance**	**Local Program Acceptance**	**Kept**
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
Chapter 28				
28	**22**	**NAAQS**	**N/A**	**Moved rules and combined** with Ch. 22. **Rescinded** Ch. 28. (Reserved)
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	**Moved from Ch. 28**, minor language updated **Rescinded** Ch. 28. (Reserved)
Chapter 29				
29	**(New) 21**	**Opacity Qualifications**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 29. (Reserved)
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
Chapter 30				
30	**30**	**Fees**	**Fee**	**Kept**
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review applications	Fees associated with new source review applications	Kept, some language updated
30.3	30.3	Fees associated with asbestos demolition or renovation notification	Fees associated with asbestos demolition or renovation notification	Kept, some language updated
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and notification of fee rates	Process to establish or adjust fees and notification of fee rates	Kept, some language updated
30.7	30.7	Fee revenue	Reserved	Language removed
Chapter 31				
31	**31**	**Nonattainment Areas**	**Nonattainment New Source Review**	**Kept**

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
31.1	31.1	Permit requirements relating to nonattainment areas	Permit requirements relating to nonattainment areas	Kept, some language updated
31.2	31.2	Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded	Reserved	Language removed
31.3	31.3	Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998	Nonattainment new source review (NNSR) requirements for areas designated nonattainment	Kept, some language updated
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas designated before May 18, 1998	N/A	Rescinded and removed
Chapter 32				
32	**N/A**	**AFO Field Study**	**N/A**	**Rescinded** Ch. 32. (Reserved)
32.1	N/A	Animal feeding operations field study	N/A	Rescinded, reserved, and language removed
32.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
32.3	N/A	Exceedance of the health effects value (HEV) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed
Chapter 33				
33	**33**	**Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality**	**Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)**	**Kept**
33.1	33.1	Purpose	Purpose	Kept, some language updated
33.2	33.2	Reserved	Reserved	Kept
33.3	33.3	Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD)	PSD construction permit requirements for major stationary sources	Kept, some language updated
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept
33.9	33.9	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated
Chapter 34				
34	**N/A**	**Emissions Trading-CAIR-CAMR**	**N/A**	**Rescinded** Ch. 34. (Reserved)
34.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
34.2 - 34.199	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.200	N/A	Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
34.201	N/A	CAIR NOx annual trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.202	N/A	CAIR designated representative for CAIR NOx sources - rescinded	N/A	Rescinded, reserved, and language removed
34.203	N/A	Permits - rescinded	N/A	Rescinded, reserved, and language removed
34.204	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.205	N/A	CAIR NOx allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.206	N/A	CAIR NOx allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.207	N/A	CAIR NOx allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.208	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.209	N/A	CAIR NOx opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.210	N/A	CAIR SO2 trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.211 - 34.219	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.220	N/A	CAIR NOx ozone season trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.221	N/A	CAIR NOx ozone season trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.222	N/A	CAIR designated representative for CAIR NOx ozone season sources - rescinded	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
34.223	N/A	CAIR NOx ozone season permits - rescinded	N/A	Rescinded, reserved, and language removed
34.224	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.225	N/A	CAIR NOx ozone season allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.226	N/A	CAIR NOx ozone season allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.227	N/A	CAIR NOx ozone season allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.228	N/A	CAIR NOx ozone season monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.229	N/A	CAIR NOx ozone season opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.230 - 34.299	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.300	N/A	Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded	N/A	Rescinded, reserved, and language removed
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.302	N/A	Hg designated representative for Hg budget sources - rescinded	N/A	Rescinded, reserved, and language removed
34.303	N/A	General Hg budget trading program permit requirements - rescinded	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
34.304	N/A	Hg allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.305	N/A	Hg allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed
Chapter 35				
35	**N/A**	**Grant Assistance Programs**	**N/A**	**Rescinded** Ch. 35. (Reserved)
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms	N/A	Rescinded, reserved, and language removed
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language removed
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed