

MM DD, YYYY

Jim Fisher Director of Operations Duke Energy Progress, LLC 4650 Simms Creek Rd Raleigh, NC 27616

SUBJECT: Air Quality Permit No. 10859R00 Facility ID: 5100226 Duke Energy Progress, LLC – Novo Nordisk Clayton Johnston County Fee Class: Title V PSD Class: Minor

Dear Jim Fisher,

In accordance with your completed application received on January 22, 2025, we are forwarding herewith Permit No. 10859R00 to Duke Energy Progress, LLC – Novo Nordisk, Clayton, Johnston County, North Carolina for the construction and operation of air emissions sources or air cleaning devices and appurtenances.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to file a petition for contested case hearing in the North Carolina Office of Administrative Hearings. Information regarding the right, procedure, and time limit for permittees and other persons aggrieved to file such a petition is contained in the attached "Notice Regarding the Right to Contest A Division of Air Quality Permit Decision."

Unless exempted by a condition of this permit or the regulations, construction of new air pollution sources or air cleaning devices, or modifications to the sources or air cleaning devices described in this permit must be covered under a permit issued by the Division of Air Quality prior to construction. Failure to do so is a violation of G.S. 143-215.108 and may subject the Permittee to civil or criminal penalties as described in G.S. 143-215.114A and 143-215.114B.

Johnston County has triggered minor source baseline dates for PM_{10} , and SO_2 . This new facility construction will result in an increase in 1.53 pounds per hour of PM_{10} and 0.050 pounds per hour of SO_2 .

This permit shall be effective from MM DD, YYYY, until MM DD, YYYY is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.



Jim Fisher MM DD, YYYY Page 2

Should you have any questions concerning this matter, please contact Lissabeth Gardner at (919) 707-8729 and Lissabeth.Gardner@nc.deq.gov.

Sincerely yours,

Mark J. Cuilla, EIT, CPM, Chief, Permitting Section Division of Air Quality, NCDEQ

Enclosure

c: Brad Akers, EPA Region 4 (Permit and Review) Laserfiche Connie Horne (cover letter only)

NOTICE REGARDING THE RIGHT TO CONTEST A DIVISION OF AIR QUALITY PERMIT DECISION

Right of the Permit Applicant or Permittee to File a Contested Case: Pursuant to NCGS 143-215.108(e), a permit applicant or permittee who is dissatisfied with the Division of Air Quality's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 in the Office of Administrative Hearings within 30 days after the Division notifies the applicant or permittee of its decision. If the applicant or permittee does not file a petition within the required time, the Division's decision on the application is final and is not subject to review. The filing of a petition will stay the Division's decision until resolution of the contested case.

Right of Other Persons Aggrieved to File a Contested Case: Pursuant to NCGS 143-215.108(e1), a person other than an applicant or permittee who is a person aggrieved by the Division's decision on a permit application may commence a contested case by filing a petition under NCGS 150B-23 within 30 days after the Division provides notice of its decision on a permit application, as provided in NCGS 150B-23(f), or by posting the decision on a publicly available Web site. The filing of a petition under this subsection does not stay the Division's decision except as ordered by the administrative law judge under NCGS 150B-33(b).

General Filing Instructions: A petition for contested case hearing must be in the form of a written petition, conforming to NCGS 150B-23, and filed with the Office of Administrative Hearings, 1711 New Hope Church Road, Raleigh NC, 27609, along with a fee in an amount provided in NCGS 150B-23.2. A petition for contested case hearing form may be obtained upon request from the Office of Administrative Hearings or on its website at https://www.oah.nc.gov/hearings-division/filing/hearing-forms. Additional specific instructions for filing a petition are set forth at 26 NCAC Chapter 03.

Service Instructions: A party filing a contested case is required to serve a copy of the petition, by any means authorized under 26 NCAC 03 .0102, on the process agent for the Department of Environmental Quality:

Daniel S. Hirschman, General Counsel North Carolina Department of Environmental Quality 1601 Mail Service Center Raleigh, North Carolina 27699-1601

If the party filing the petition is a person aggrieved other than the permittee or permit applicant, the party **must also** serve the permittee in accordance with NCGS 150B-23(a).

* * *

Additional information is available at <u>https://www.oah.nc.gov/hearings-division/hearing-process/filing-contested-case</u>. Please contact the OAH at 984-236-1850 or oah.postmaster@oah.nc.gov with all questions regarding the filing fee and/or the details of the filing process.



State of North Carolina Department of Environmental Quality Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
10859R00	N/A	MM DD, YYYY	MM DD, YYYY

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee:	Duke Energy Progress, LLC – Novo Nordisk
Facility ID:	5100226
Primary SIC Code:	4911
NAICS Code:	221112
Facility Site Location:	638 GLP One Way
City, County, State, Zip:	Clayton, Johnston, North Carolina 27527
Mailing Address:	4650 Simms Creek Rd
City, State, Zip:	Raleigh, North Carolina 27616
Application Number(s):	5100226.25A
Complete Application Date(s):	March 26, 2025
Division of Air Quality,	Raleigh Regional Office
Regional Office Address:	3800 Barrett Dr.
-	Raleigh, NC 27609

Table of Contents

LIST OF ACRONYMS

- SECTION 1: PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES
- SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS
 - 2.1 Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- SECTION 3: INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q 0.503(8)
- SECTION 4: GENERAL PERMIT CONDITIONS

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
CSAPR	Cross-State Air Pollution Rule
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
GHGs	Greenhouse Gases
НАР	Hazardous Air Pollutant
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
OAH	Office of Administrative Hearings
PAE	Projected Actual Emissions
PAL	Plantwide Applicability Limitation
PM	Particulate Matter
PM _{2.5}	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
PM ₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide Toxic Air Pollutant
TAP	Toxic Air Pollutant Tons Per Year
tpy VOC	Volatile Organic Compound
	volatile Organie Compound

SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contai	ns a summary of all permitted emission sources and assoc	iated air pollution contro	ol devices and appurtenances:
Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-1 through ES-7 NSPS IIII MACT ZZZZ	Seven No.2 fuel oil-fired emergency generator engines (917 horsepower engine output, each) (625 kW generator output, each)	N/A	N/A
ES-8 through ES-11 NSPS-IIII MACT ZZZZ	Four No.2 fuel oil-fired emergency generator engines (917 horsepower engine output, each) (600 kW generator output, each)	N/A	N/A
ES-12 MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,172 horsepower engine output) (1,500 kW generator output)	N/A	N/A
ES-13 MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,172 horsepower engine output) (1,500 kW generator output)	N/A	N/A
ES-14 MACT ZZZZ	No. 2 fuel oil-fired emergency generator engine (2,520 horsepower engine output) (1,750 kW generator output)	N/A	N/A
ES-15 MACT ZZZZ	No. 2 fuel oil-fired emergency generator engine (2,520 horsepower engine output) (1,750 kW generator output)	N/A	N/A
ES-16 NSPS-IIII MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,584 horsepower engine output) (1,750 kW generator output)	N/A	N/A
ES-17 MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,520 horsepower engine output) (1,800 kW generator output)	N/A	N/A
ES-18 through ES- 26 NSPS-IIII MACT ZZZZ	Nine No.2 fuel oil-fired emergency generator engines (3,399 horsepower engine output, each) (2,500 kW generator output, each)	N/A	N/A
ES-27 through ES- 30 NSPS-IIII MACT ZZZZ	Four No.2 fuel oil-fired emergency generator engines (4,079 horsepower engine output, each) (3,000 kW generator output, each)	N/A	N/A

* Pursuant to application 5100226.24A, these emission source(s) **(ID No(s). ES-1 through ES-30)** are listed as a 15A NCAC 02Q .0501(b)(2) modification. The Permittee shall file a Title V Air Quality Permit Application on or before 12 months after commencing operation of any of these emission source(s) and/or control device(s) in accordance with General Condition NN. The permit shield described in General Condition R does not apply and annual compliance certification as described in General Condition P is not required.

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. The following emergency generators:

Emission Source	Table 2.1 A	Control Device ID	
ID No.	Emission Source Description	No.	Control Device Description
ES-1 through ES-7 NSPS IIII MACT ZZZZ	Seven No.2 fuel oil-fired emergency generator engines (917 horsepower engine output, each) (625 kW generator output, each)	N/A	N/A
ES-8 through ES-11 NSPS-IIII MACT ZZZZ	Four No.2 fuel oil-fired emergency generator engines (917 horsepower engine output, each) (600 kW generator output, each)	N/A	N/A
ES-12 MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,172 horsepower engine output) (1,500 kW generator output)	N/A	N/A
ES-13 MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,172 horsepower engine output) (1,500 kW generator output)	N/A	N/A
ES-14 MACT ZZZZ	No. 2 fuel oil-fired emergency generator engine (2,520 horsepower engine output) (1,750 kW generator output)	N/A	N/A
ES-15 MACT ZZZZ	No. 2 fuel oil-fired emergency generator engine (2,520 horsepower engine output) (1,750 kW generator output)	N/A	N/A
ES-16 NSPS-IIII MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,584 horsepower engine output) (1,750 kW generator output)	N/A	N/A
ES-17 MACT ZZZZ	No.2 fuel oil-fired emergency generator engine (2,520 horsepower engine output) (1,800 kW generator output)	N/A	N/A
ES-18 through ES- 26 NSPS-IIII MACT ZZZZ	Nine No.2 fuel oil-fired emergency generator engines (3,399 horsepower engine output, each) (2,500 kW generator output, each)	N/A	N/A
ES-27 through ES- 30 NSPS-IIII MACT ZZZZ	Four No.2 fuel oil-fired emergency generator engines (4,079 horsepower engine output, each) (3,000 kW generator output, each)	N/A	N/A

Table 2.1 A

Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu of heat input	15A NCAC 02D .0516
Visible Emissions	20 percent	15A NCAC 02D .0521
Non-methane	Excluding ID Nos. ES-12 through ES-15 and ES-17	15A NCAC 02D .0524
hydrocarbons,	See Section 2.1.A.3	(40 CFR 60, Subpart IIII)
Nitrogen Oxides,		
Carbon Monoxide,		
Particulate Matter		
Hazardous Air	Excluding ID Nos. ES-12 through ES-15 and ES-17	15A NCAC 02D .1111
Pollutants	See Section 2.1.A 4	(40 CFR 63, Subpart ZZZZ)
	ID Nos. ES-12 through ES-15 and ES-17 Only See Section 2.1.A 5	
Odors	State-enforceable only	15A NCAC 02D .1806
Excess Emissions	See Section 2.1 A.7	15A NCAC 02D .0535
Particulate Matter	See Section 2.1 A.8	15A NCAC 02D .0540
-	See Section 2.1 A.9	15A NCAC 02Q .0304(d) and (f)
-	See Section 2.1 A.10	15A NCAC 02Q .0207
-	See Section 2.1 A.11	15A NCAC 02Q .0504

The following table provides a summary of limits and standards for the emission source(s) described above:

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.
- <u>Testing</u> [15A NCAC 02Q .0308(a)] If emissions testing is required, the testing shall be performed in accordance with General Condition 17.
- Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0308(a)] No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of No. 2 fuel oil in these emergency generators.

2. 15A NCAC 02D .0521 CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not exceed 20 percent opacity each when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hours period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0308(a)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring/Record keeping/Reporting [15A NCAC 02Q .0308(a)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of No. 2 fuel oil in these sources.

3. 15A NCAC 02D .0524 NEW SOURCE PERFORMANCE STANDARDS

Applicability [40 CFR 60.4200(a)(2)(i)]

a. For the sources in Table 2.1 A above, excluding the sources (ID Nos. ES-12 though ES-15 and ES-17), the Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" including Subpart A "General Provisions."

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 60.4219 shall apply.

General Provisions

c. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 to 40 CFR 60 Subpart IIII. [40 CFR 60.4218]

Emission Standards [15A NCAC 02Q .0308(a)]

d. The Permittee shall comply with the emission standards 40 CFR 60.4202 for all pollutants, for the same model year and maximum engine power for this engine. [40 CFR 60.4205(b)]

Fuel Requirements [15A NCAC 02Q .0308(a)]

- e. The Permittee shall use diesel fuel in the engine that meets the requirements of 40 CFR 1090.305 including:
 - i. a maximum sulfur content of 15 ppm; and

ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]

Testing [15A NCAC 02Q .0308(a)]

f. If emissions testing is required, the testing shall be performed in accordance with General Condition 17.

Monitoring [15A NCAC 02Q .0308(a)]

- g. The engine has the following monitoring requirements:
 - i. The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
 - ii. The engine, if equipped with a diesel particulate filter, must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. [40 CFR 60.4209(b)]

Compliance Requirements [15A NCAC 02Q .0308(a)]

- h. The Permittee shall:
 - i. operate and maintain the <u>engines and control devices</u> according to the manufacturer's emission related-written instructions over the entire life of the engine;
 - ii. change only those emission-related settings that are permitted by the manufacturer; and
 - iii. meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable.
 - [40 CFR 60.4206 and 60.4211(a)]
- The Permittee shall comply with the emission standards in Section 2.1 A.3.d above by purchasing an engine certified to the emission standards in Section 2.1 A.3.d above for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]
- j. In order for the engine to be considered an emergency stationary internal combustion engine (ICE) as defined in Section 2.1 A.3.b above, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
 - i. There is no time limit on the use of emergency stationary ICE in emergency situations.
 - ii. The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph j.ii.(A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency

situations as allowed by paragraph j.(iii) below counts as part of the 100 hours per calendar year allowed by this paragraph j.(ii).

- (A) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph j.(ii) above. Except as provided in paragraph j.iii.(A) below, the 50 hours per calendar year for non- emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (A) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (4) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)]

k. RESERVED

Recordkeeping [15A NCAC 02Q .0308(a)]

- 1. The following records shall be maintained:
 - i. The results of inspection and maintenance made pursuant to Section 2.1 A.3.h above shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
 - (A) the date and time of each recorded action;
 - (B) the results of each inspection;
 - (C) the results of any maintenance performed on the engine;
 - (D) any variance from manufacturer's recommendations, if any, and corrections made;
 - (E) the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time [40 CFR 60.4214(b)]; and
 - (F) if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR 60.4214(c)];
 - ii. documentation from the manufacturer that the engine is certified to meet the emission standards in Section 2.1 A.3.d above; and
 - iii. records showing the fuel combusted meets the requirements in Section 2.1 A.3.e above.

Reporting [15A NCAC 02Q .0308(a)]

m. The Permittee shall meet the following reporting requirements:

- i. The Permittee shall submit a summary report of monitoring and recordkeeping activities in Section(s) 2.1 A.3.g through l above to the DAQ postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.
- ii. If the Permittee owns or operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purposes specified in Section 2.1 A.3.j.iii(A) above, the Permittee shall submit an annual report to the DAQ according to the requirements at 40 CFR 60.4214(d). [40 CFR 60.4214(d)]
- iii. The report in paragraph m.ii above shall also be submitted directly to the EPA electronically pursuant to 40 CFR 60.4214(g). [40 CFR 60.4214(d)(3)]
 - (A) The Permittee may assert a claim of EPA system outage for failure to timely comply with this electronic reporting requirement if the requirements outlined in 40 CFR 60.4214(h) are met. [40 CFR 60.4214(h)]
 - (B) The Permittee may assert a claim of force majeure for failure to timely comply with this electronic reporting requirement if the requirements outlined 40 CFR 60.4214(i) are met. [40 CFR 60.4214(i)]

4. 15A NCAC 02D .1111 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability

a. For the sources in Table 2.1 A above (i.e., new stationary RICE located at an area source of HAP emissions) excluding the sources (ID Nos. ES-12 through ES-15 and ES-17) the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emission Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions." [40 CFR 63.6585, 63.6590(a)(2)(iii)]

Stationary RICE subject to Regulations under 40 CFR Part 60 [15A NCAC 02Q. 0308(a)]

b. Pursuant to 40 CFR 63.6590(c)(1), these sources shall meet the requirements of 40 CFR 63 Subpart ZZZZ and Subpart A by meeting the requirements of 40 CFR 60 Subpart IIII. No further requirements apply for these engines under 40 CFR 63 Subpart ZZZZ and Subpart A.

5. 15A NCAC 02D .1111 MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability

a. For these sources (i.e., existing emergency stationary compression ignition [CI] reciprocating internal combustion engines[RICE] located at an area source of HAP emissions) (ID Nos ES-12 through ES-15 and ES-17), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions." [40 CFR 63.6585, 63.6590(a)(1)(iii)]

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date

c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. [40 CFR 63.6595(a)(1)]

Notifications

d. The Permittee has no notification requirements. [40 CFR 63.6645(a)(5)]

General Provisions [

e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ. 40 CFR 63.6665]

Operating and Maintenance Requirements [15A NCAC 02Q .0308(a)]

- f. During periods of startup of the engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6603(a), Table 2d to 40 CFR 60 Subpart ZZZZ and 63.6625(h)]
- g. Except during periods of startup of the engine, the Permittee shall:
 - i. change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;
 - ii. inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; and
 - iii. inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, and replace as necessary

[40 CFR 63.6603(a), Table 2d to 40 CFR 63 Subpart ZZZZ]

- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Section 2.1 A.5.g above. [40 CFR 63.6603(a), Table 2d to 40 CFR 63 Subpart ZZZZ, 63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Section 2.1 A.5.g above, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a), Table 2d to 40 CFR 63 Subpart ZZZZ]
- j. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements that apply at all times. [40 CFR 63.6605(a)]
- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6 to 40 CFR 63 Subpart ZZZZ]
- m. In order for the engine to be considered an emergency stationary RICE as defined in Section 2.1 A.5.b above, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs m.i through m.iii below, is prohibited.
 - i. There is no time limit on the use of emergency stationary RICE in emergency situations.
 - ii. The Permittee may operate emergency stationary RICE for any combination of the purposes specified in paragraph m.ii.(A) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph iii below counts as part of the 100 hours per calendar year allowed by this paragraph m.ii.
 - (A) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- iii. Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph m.ii above. Except as provided in paragraph m.iii.(A) below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (A) The 50 hours per year for non- emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (1) the engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - (2) the dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (3) the dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (4) the power is provided only to the facility itself or to support the local transmission and distribution system.
 - (5) the owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.
- [40 CFR 63.6640(f)(1), (2) and (4)]
- n. RESERVED

Fuel Requirements [15A NCAC 02Q .0308(a)]

o. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates for the purpose specified in Section 2.1 A.5.m.iii.(A) above, you must use diesel fuel that meets the requirements in 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR 63.6604(b)]

Monitoring [15A NCAC 02Q .0308(a)]

p. The Permittee shall install a non-resettable hour meter on the engine if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 02Q .0308(a)]

- q. The Permittee shall keep the following:
 - i. a copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv)[40 CFR 63.6655(a)(1)];
 - ii. records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6655(a)(2)];
 - iii. records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)];
 - iv. records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.1 A.5.k above, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.6655(a)(5)];
 - v. records of the maintenance conducted on the RICE pursuant to Section 2.1 A.5.1 above [40 CFR 63.6655(d) and (e)];
 - vi. records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation [40 CFR 63.6655(f)];
 - vii. if the engine is used for the purposes specified in Section 2.1 A.5.m.iii(A) above, records of the notification of the situation, and the date, start time, and end time of engine operation for these purposes [40 CFR 63.6655(f)]; and
 - viii. each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the

date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), and (c)]

Reporting [15A NCAC 02Q .0308(a)]

- r. The following reporting requirements apply:
 - The Permittee shall submit to the DAQ a semiannual compliance report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b) and (e), and 63.6650(b)(5) and (f)]
 - ii. The compliance report shall also include any reporting required under Section 2.1 A.5.i above, as necessary. [Table 2d to 40 CFR 63 Subpart ZZZZ]
 - iii. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates for the purpose specified in Section 2.1 A.5.m.iii(A) above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the DAQ and electronically to the EPA. These annual reports shall cover the calendar year and shall be submitted no later than March 31 of the following calendar year. [40 CFR 63.6650(h) and (i)]
 - iv. The Permittee shall submit the annual report specified in paragraph iii above to the EPA using the appropriate electronic report template on the CEDRI website (https:// www.epa.gov/electronic-reporting-air-emissions/cedri) for this subpart and following the procedure specified in 40 CFR 63.9(k), except any CBI must be submitted according to the procedures in 40 CFR 63.6645(h). The date report templates become available will be listed on the CEDRI website. [40 CFR 63.6650(i)]

State-enforceable only

6. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

7. NOTIFICATION REQUIREMENT

As required by 15A NCAC 02D .0535, the Permittee of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

- a. Notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
 - i. the name and location of the facility,
 - ii. the nature and cause of the malfunction or breakdown,
 - iii. the time when the malfunction or breakdown is first observed,
 - iv. the expected duration, and
 - v. an estimated rate of emissions.
- b. Notify the Director or his designee immediately when the corrective measures have been accomplished. This reporting requirement does not allow the operation of the facility in excess of Environmental Management Commission Regulations.

8. FUGITIVE DUST CONTROL REQUIREMENT

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints are received or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stockpile working, plant parking lots, and plant roads (including access roads and haul roads).

9. PERMIT RENEWAL REQUIREMENT

The Permittee, at least 90 days prior to the expiration date of this permit, shall request permit renewal by letter in accordance with 15A NCAC 02Q .0304(d) and (f). Pursuant to 15A NCAC 02Q .0203(i), no permit application fee is required for renewal of an existing air permit (without a modification request). The renewal request (with AA application form) should be submitted to the Regional Supervisor, DAQ.

10. ANNUAL EMISSION INVENTORY REQUIREMENT

Pursuant to 15A NCAC 02Q .0207, the Permittee shall submit an air pollution emission inventory report (with Certification Sheet) by June 30 of each year in accordance with 15A NCAC 02Q .0207(a). The report shall include the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year and be submitted to the Regional Supervisor, DAQ. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility as defined under 40 CFR 70.2.

11. 15A NCAC 02Q .0504: OPTION FOR OBTAINING CONSTRUCTION AND OPERATION PERMIT

Permitting [15A NCAC 02Q .0504(c)]

a. Pursuant to 15A NCAC 02Q .0501(b)(2) for completion of the two-step significant modification process initiated by Application No. 5100556.24A, the Permittee shall file an amended application following the procedures of Section 15A NCAC 02Q .0500 within one year from the date of beginning operation of any sources.

<u>Reporting</u> [15A NCAC 02Q .0308(a)(1)]

b. The Permittee shall notify the Regional Office in writing of the date of beginning operation of any sources postmarked no later than 30 days after such date.

SECTION 3 - INSIGNIFICANT ACTIVITIES PER 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description ^{1,2}	
NA	NA	

¹Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement (Federal or State) or that the Permittee is exempted from demonstrating compliance with any applicable requirement.

² When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."

SECTION 4 - GENERAL CONDITIONS AND LIMITATIONS

1. In accordance with G.S. 143-215.108(c)(1), <u>TWO COPIES OF ALL DOCUMENTS, REPORTS, TEST DATA,</u> <u>MONITORING DATA, NOTIFICATIONS, REQUESTS FOR RENEWAL, AND ANY OTHER INFORMATION</u> <u>REQUIRED BY THIS PERMIT</u> shall be submitted to the:

Regional Supervisor North Carolina Division of Air Quality Fayetteville Regional Office 225 Green Street, Suite 714 Fayetteville, NC 28301 910-433-3300

For identification purposes, each submittal should include the facility name as listed on the permit, the facility identification number, and the permit number.

- <u>RECORDS RETENTION REQUIREMENT</u> In accordance with 15A NCAC 2D .0605, any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. These records must be kept on site for a minimum of 2 years, unless another time period is otherwise specified.
- 3. <u>ANNUAL FEE PAYMENT</u> Pursuant to 15A NCAC 2Q .0203(a), the Permittee shall pay the annual permit fee within 30 days of being billed by the DAQ. Failure to pay the fee in a timely manner will cause the DAQ to initiate action to revoke the permit.
- 4. <u>EQUIPMENT RELOCATION</u> In accordance with 15A NCAC 2Q .0301, a new air permit shall be obtained by the Permittee prior to establishing, building, erecting, using, or operating the emission sources or air cleaning equipment at a site or location not specified in this permit.
- 5. <u>REPORTING REQUIREMENT</u> In accordance with 15A NCAC 2Q .0309, any of the following that would result in previously unpermitted, new, or increased emissions must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application regarding facility emissions;
 - b. changes that modify equipment or processes of existing permitted facilities; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

- 6. In accordance with 15A NCAC 2Q .0309, this permit is subject to revocation or modification by the DAQ upon a determination that information contained in the application or presented in the support thereof is incorrect, conditions under which this permit was granted have changed, or violations of conditions contained in this permit have occurred. In accordance with G.S. 143-215.108(c)(1), the facility shall be properly operated and maintained at all times in a manner that will effectuate an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air cleaning device(s) and appurtenances.
- 7. <u>CHANGES NOT REQUIRING PERMIT REVISIONS</u> Pursuant to 15A NCAC 02Q .0318, changes to the facility that are not exempt pursuant to 15A NCAC 02Q .0102 may be allowed without first modifying an applicable air permit if the change(s) meet(s) the requirements of 15A NCAC 02Q .0318(b)(1) through (b)(5) and the owner or operator notifies the Director in writing, using forms provided by the Division, seven calendar days before the

change is made. Within 10 business days of receipt of the notice, the Division shall notify the owner or operator of its determination of whether the change(s) meet(s) the requirements of 15A NCAC 02Q .0318(b)(1) through (b)(5).

- 8. In accordance with G.S. 143-215.108(c)(1), this permit is nontransferable by the Permittee. Future owners and operators must obtain a new air permit from the DAQ.
- 9. In accordance with G.S. 143-215.108(c)(1), this issuance of this permit in no way absolves the Permittee of liability for any potential civil penalties which may be assessed for violations of State law which have occurred prior to the effective date of this permit.
- 10. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with all applicable requirements of any Federal, State, or Local water quality or land quality control authority.
- 11. In accordance with 15A NCAC 2D .0605, reports on the operation and maintenance of the facility shall be submitted by the Permittee to the Regional Supervisor, DAQ at such intervals and in such form and detail as may be required by the DAQ. Information required in such reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and preventive maintenance schedules.
- 12. A violation of any term or condition of this permit shall subject the Permittee to enforcement pursuant to G.S. 143-215.114A, 143-215.114B, and 143-215.114C, including assessment of civil and/or criminal penalties.
- 13. Pursuant to North Carolina General Statute 143-215.3(a)(2), no person shall refuse entry or access to any authorized representative of the DAQ who requests entry or access for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
- 14. In accordance with G.S. 143-215.108(c)(1), this permit does not relieve the Permittee of the responsibility of complying with any applicable Federal, State, or Local requirements governing the handling, disposal, or incineration of hazardous, solid, or medical wastes, including the Resource Conservation and Recovery Act (RCRA) administered by the Division of Waste Management.
- 15. <u>PERMIT RETENTION REQUIREMENT</u> In accordance with 15A NCAC 2Q .0110, the Permittee shall retain a current copy of the air permit at the site. The Permittee must make available to personnel of the DAQ, upon request, the current copy of the air permit for the site.
- 16. <u>CLEAN AIR ACT SECTION 112(r) REQUIREMENTS</u> Pursuant to 15A NCAC 2D .2100 "Risk Management Program," if the Permittee is required to develop and register a risk management plan pursuant to Section 112(r) of the Federal Clean Air Act, then the Permittee is required to register this plan with the USEPA in accordance with 40 CFR Part 68.
- 17. <u>GENERAL EMISSIONS TESTING AND REPORTING REQUIREMENTS</u> If emissions testing is required by this permit, or the DAQ, or if the Permittee submits emissions testing to the DAQ in support of a permit application or to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 2D .2600 and follow all DAQ procedures including protocol approval, regional notification, report submittal, and test results approval. Additionally, in accordance with 15A NCAC 2D .0605, the Permittee shall follow the procedures for obtaining any required audit sample and reporting those results.

Permit issued this the DDth of MM, 2025. NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION Permit 10859R00 Page 17

> Mark J. Cuilla, EIT, CPM Chief, Permits Section By Authority of the Environmental Management Commission

Air Permit No. 10859R00