

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director



TBD

Jesse English
Plant Manager
Cleveland County Generating Facility
5755 North Carolina 801 Highway
Salisbury, NC 28147

Subject: Air Permit No. 09881T07
Cleveland County Generating Facility
Kings Mountain, Cleveland County, North Carolina
Fee Class: Title V
Facility ID: 2300372
PSD Class: Major

Dear Mr. English:

In accordance with your completed Air Quality Permit Applications for a significant modification of a Title V permit, received April 12, 2019, we are forwarding herewith Air Quality Permit No. 09881T07 to the Cleveland County Generating Facility, Kings Mountain, Cleveland County, North Carolina authorizing the construction and operation, of the emission sources and associated air pollution control devices specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

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 request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions



North Carolina Department of Environmental Quality | Division of Air Quality
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641
919.707.8400

Mr. Jesse English

TBD

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or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Cleveland County has triggered increment tracking under PSD for PM₁₀, SO₂ and NO_x. This significant modification is expected to consume the following increment: PM₁₀: +2.8 pounds per hour.

This Air Quality Permit shall be effective from TBD until June 30, 2023, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Russell Braswell at 919-707-8731 or russell.braswell@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

c: Mooresville Regional Office
Central Files
EPA Region IV
Connie Horne (cover letter only)

**ATTACHMENT to Cover Letter to Air Quality Permit No. 09881T07
Cleveland County Generating Facility**

List of Changes

The following changes were made to the Cleveland County Generating Facility Air Permit No. 09881T06:

Page*	Condition*	Changes
Throughout	n/a	<ul style="list-style-type: none">• Updated permit numbers/dates• Removed references to 02D .0530(h)• Updated authorized contact
11	2.2 A.1	<ul style="list-style-type: none">• Changed hourly PM emission limit from 9.1 to 9.8 based on application• Removed natural gas sulfur content limit. The limit is now only the use of pipeline-quality natural gas.• Noted that performance testing has been completed.
n/a	2.2 A.2 (former)	<ul style="list-style-type: none">• Removed this section because 02D .0530(h) does not apply to this facility.
16	3.	<ul style="list-style-type: none">• Updated General Conditions to v5.3.

* This refers to the current permit, unless otherwise stated.

Insignificant Activities per 15A NCAC 02Q .0503(8)

Emission Source ID No.	Emission Source Description
IS-1	Lube oil systems
IS-2	False-start drain tanks
IS-3	Natural gas condensate tank

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement 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."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.



AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Issue Date	Expiration Date
09881T07	09881T06	TBD	June 30, 2023

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission sources and associated air pollution control devices 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 sources 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: **Cleveland County Generating Facility**

Facility ID Number: 2300372

Facility Site Location: 240 Battleground Road
City, County, State, Zip: Kings Mountain, Cleveland County, North Carolina, 28086

Mailing Address: 5755 North Carolina 801 Highway
City, State, Zip: Salisbury, North Carolina, 28147

Application Numbers: 2300372.19A
Complete Application Date: April 12, 2019

Primary SIC Code: 4911
Division of Air Quality, Mooresville Regional Office
Regional Office Address: 610 East Center Avenue, Suite 301
Mooresville, NC 28115

Permit issued this the TBD.

William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

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List of Acronyms

Acid Rain Permit Application, revised and dated February 28, 2018

SECTION 1- PERMITTED EMISSION SOURCES AND ASSOCIATED AIR POLLUTION CONTROLS AND APPURTENANCES

The following table contains a summary of all permit emission sources and associated air pollution control devices and appurtenances:

Page No(s).	Source ID No(s).	Emissions Source Description	Control Device ID No.
4-8, 10-15	ES1, ES2, ES3, and ES4 NSPS KKKK; PSD	Four natural gas/ No. 2 fuel oil-fired simple-cycle internal combustion turbines (each 2,210 million Btu per hour maximum heat input rate and equipped with dry low-NOx combustors when firing natural gas; each 2,129 million Btu per hour maximum heat input rate and having water injection capability when firing fuel oil)	N/A
10-14	ES10 PSD	One No. 2 fuel oil fixed-roof storage tank (2.3 million gallons capacity)	N/A
9-14	ES12 PSD	One natural gas-fired fuel gas heater (5.47 million Btu per hour maximum heat input rate) with Ultra-low NOx burners	N/A

SECTION 2- SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Sources and Control Devices 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. Four simple-cycle internal combustion turbines (each equipped with dry low-NO_x combustors when firing natural gas and each having water injection capability when firing fuel oil; ID Nos. ES1, ES2, ES3, and ES4)

The following table provides a summary of limits and standards for the emissions sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Carbon monoxide (CO)	See Multiple Emissions Section 2.2 A. <i>Firing No. 2 fuel oil:</i> <ul style="list-style-type: none"> • 10 ppmvd @ 15% O₂ at 90 to 100% load • 20 ppmvd @ 15% O₂ at 80 to < 90% load • 30 ppmvd @ 15% O₂ at 70 to < 80% load <i>Firing natural gas:</i> <ul style="list-style-type: none"> • 4 ppmvd @ 15% O₂ at 70 to 100% load • 10 ppmvd @ 15% O₂ at 60 to < 70% load 	15A NCAC 02D .0530 PSD (BACT)
Nitrogen oxides (NO _x as NO ₂)	<i>Firing No. 2 fuel oil:</i> 42 ppm NO _x @ 15% O ₂	15A NCAC 02D .0524 40 CFR 60, Subpart KKKK
	<i>Firing natural gas:</i> 15 ppm NO _x @ 15% O ₂	
	<i>Any fuel @ <75% load:</i> 96 ppm NO _x @ 15% O ₂	
	<i>Any fuel @ <0°F:</i> 96 ppm NO _x @ 15% O ₂	
	See Multiple Emissions Section 2.2 A. <i>Firing No. 2 fuel oil:</i> 42 ppm NO _x @ 15% O ₂ <i>Firing natural gas:</i> 9 ppm NO _x @ 15% O ₂	15A NCAC 02D .0530 PSD (BACT)
	Demonstrate compliance with 02D .0530 limits using CEMS.	15A NCAC 02D .1418
Phase II Acid Rain permit requirements See Section 2.3	15A NCAC 02Q .0402 (40 CFR Part 72)	
Cross State Air Pollution Rule (CSAPR) requirements See Section 2.4	40 CFR Part 97, Subparts AAAAA and BBBBB	
Particulate Matter PM/PM ₁₀ (filterable+condensable)	See Multiple Emissions Section 2.2.A <i>Firing No. 2 fuel oil:</i> 0.0646 lb/million Btu <i>Firing natural gas:</i> 0.0083 lb/million Btu	15A NCAC 02D .0530 PSD (BACT)

Regulated Pollutant	Limits/Standards	Applicable Regulations
Sulfur dioxide (SO ₂)	0.06 lb/million Btu heat input	15A NCAC 02D .0524 40 CFR 60, Subpart KKKK
	Phase II Acid Rain permit requirements See Section 2.3	15A NCAC 02Q .0402 (40 CFR Part 72)
	Cross State Air Pollution Rules (CSAPR) requirements See Section 2.4	40 CFR Part 97, Subpart CCCC
Visible emissions (VE)	20 percent opacity	15A NCAC 02D .0521
Volatile organic compounds (VOC as CH ₄)	See Multiple Emissions Section 2.2.A <u>Firing No. 2 fuel oil:</u> <ul style="list-style-type: none"> • 10 ppmvd @ 15% O₂ <u>Firing natural gas:</u> <ul style="list-style-type: none"> • 1 ppmvd @ 15% O₂ at 70 to 100% load • 5 ppmvd @ 15% O₂ at 60 to < 70% load 	15A NCAC 02D .0530 PSD (BACT)

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from each of the four combustion turbines (**ID Nos. ES1 through ES4**) shall not be more than 20 percent opacity 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-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for visible emissions from the firing of natural gas and/or No. 2 fuel oil in any turbine.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS (40 CFR PART 60, SUBPART KKKK)

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart KKKK, including Subpart A "General Provisions."

Emission Limitations [40 CFR 60.4325, §60.4330(a)(1),(2), §60.4380(b)(3), §60.8(c)]

- b. The Permittee shall limit sulfur dioxide (SO₂) emissions from the combustion turbines (**ID Nos. ES1 through ES4**) to 0.06 pounds per million Btu heat input.

- c. The Permittee shall not cause to be discharged into the atmosphere from any combustion turbine (**ID Nos. ES1 through ES4**) any gases which contain nitrogen dioxide (NO_x) emissions in excess of the following limits, except during periods of startup, shutdown, or malfunction:
- i. 15 ppm at 15 percent O₂ (4-hour rolling average) when firing natural gas and operating at or above 75% of peak load;
 - ii. 42 ppm at 15 percent O₂ (4-hour rolling average) when firing fuel oil and operating at or above 75% of peak load;
 - iii. 96 ppm at 15 percent O₂ (4-hour rolling average) when operating below 75% of peak load; and
 - iv. 96 ppm at 15 percent O₂ (4-hour rolling average) when operating at temperatures less than 0 °F.
 - v. For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

Testing [15A NCAC 02Q .0508(f)]

- d. i. The Permittee completed the initial compliance demonstration on July 31, 2012 (test reference number 2012-135ST)
- ii. If additional emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above an applicable limit given in Section 2.1 A.2.b or 2.1 A.2.c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Operational Requirements [15A NCAC 02D .0524, and §60.4325, §60.4333]

- e. The Permittee shall operate and maintain each stationary combustion turbines, including the low NO_x burners and water injection systems, and all associated monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times including during periods of startup, shutdown and malfunction
- f. The Permittee shall use water injection to control NO_x emissions when firing fuel oil in a combustion turbine.

Nitrogen Dioxide (NO_x) Emissions Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 40 CFR §60.4335 through §60. 4355]

- g. The Permittee shall install, certify, maintain, and operate a continuous emissions monitoring system (CEMS) consisting of a NO_x monitor and a diluent gas (CO₂ or O₂) monitor to determine the hourly NO_x emission rate in parts per million (ppm) or in pounds per million Btu's, and a fuel flow meter to continuously measure the heat input when burning natural gas or fuel oil in a turbine.
- i. An excess emissions is any unit operating period in which the 4-hour rolling average NO_x emission rate exceeds the emission limit in 2.1 A.2.c.i above. A "4-hour rolling average NO_x emission rate" is the arithmetic average of the average NO_x emission rate measured by the CEMS for a given hour and the three unit operating hour average NO_x emission rates immediately preceding that unit operating hour.
 - ii. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_x concentration, CO₂ or O₂ concentration, and fuel flow rate.

- iii. Each NO_x diluent (CO₂ or O₂) CEMS must be installed and certified in accordance with 40 CFR 60.4345(a).
- iv. As specified in §60.13(e)(2), during each full unit operating hour, both the NO_x and CO₂ (or O₂) CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO_x emission rate for the hour.
- v. Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions or meet the installation, certification, and quality assurance requirements of appendix D to 40 CFR 75.
- vi. The Permittee shall maintain on-site a quality assurance (QA) plan for the CEMS, as described in §75.19(e)(5) or in Appendix E (Section 2.3) and Appendix B (Section 1.3.6) to 40 CFR 75.
- h. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if monitoring is not performed and records are not maintained.

Sulfur Dioxide (SO₂) Emissions Monitoring/Recordkeeping [15A NCAC 02Q .0508(f) and 40 CFR §60 .4360 through §60 .4370]

- i. The Permittee shall use one of the following methods to demonstrate compliance with the sulfur dioxide emission limit:
 - i. Monitor the total sulfur content of the fuel being fired in the combustion turbines using the total sulfur methods described in §60.4415 or the alternative described in §60.4360; or
 - ii. Demonstrate that the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the total sulfur content for oil is 0.05 weight percent (500 ppmw) or less and the total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet, or
 - iii. Demonstrate, by using representative fuel sampling, that the sulfur content of the fuel does not exceed 0.060 lb SO₂ per million Btu in accordance with §60.4365(b) and §60.4370. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 of this chapter is required.
- j. For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
- k. If the option to sample each delivery of fuel oil has been selected and the sulfur content of a delivery exceeds 0.05 weight percent, the Permittee must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank). The Permittee must continue to use one of the other sampling options until all of the oil from the delivery has been combusted. When all of the fuel from the delivery has been burned, the as-delivered sampling option may be resumed.

- l. A period of monitor downtime begins when a required sample is not taken by its due date and also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.
- m. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. Records shall include each excess emission and each period of monitor downtime. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

- n. The Permittee shall submit summary reports to the Regional Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and on or before July 30 of each calendar year for the preceding six-month period between January and June. The reports shall include any excess emission and any period of monitor downtime for all periods of operation, including start-up, shutdown, and malfunction.

3. 15A NCAC 02D .1418: NEW ELECTRIC GENERATING UNITS

- a. The Permittee shall not cause to be discharged into the atmosphere from combustion turbines (**ID Nos. ES1 through ES4**) any gases which contain nitrogen dioxide (NO_x) emissions in excess of the emission limits in Section 2.2 A.1.a during ozone season. The ozone season shall be defined as the period of time extending from May 1st to September 30th of each calendar year.

Monitoring [15A NCAC 02Q .0508(f)]

- b. The Permittee shall install, certify, maintain, and operate a continuous emissions monitoring system (CEMS) consisting of a NO_x monitor and a diluent gas (CO₂ or O₂) monitor to determine the hourly NO_x emission rate in parts per million (ppm) or in pounds per million Btu's, and a fuel flow meter to continuously measure the heat input for each combustion turbine burning natural gas and/or fuel oil during the ozone season. The monitoring requirements in Section 2.1 A.2.h.i through vi shall apply for each required CEMS.

Reporting [15A NCAC 02Q .0508(f)]

- c. The Permittee shall submit summary reports to the Regional Supervisor postmarked on before January 30 of each calendar year for the preceding six-month period between July and December and by July 30 of each calendar year for the preceding six-month period between January and June. The reports shall include any excess emission and any period of monitor downtime for all periods of operation during the ozone season, including start-up, shutdown, and malfunction.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0508(f)]

- d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in these sources.

B. One natural gas-fired fuel gas heater with ultra-low NOx burners (ID No. ES12)

The following table provides a summary of limits and standards for the emissions sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulations
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
CO	See Multiple Emissions Section 2.2.A; 0.08 lb/million Btu	15A NCAC 02D .0530 PSD (BACT)
NOx (as NO ₂)	See Multiple Emissions Section 2.2.A 0.01 lb/million Btu	15A NCAC 02D .0530 PSD (BACT)
PM/PM ₁₀ (filterable and condensable)	See Multiple Emissions Section 2.2.A 0.0076 lb/million Btu	15A NCAC 02D .0530 PSD (BACT)
VOC (as CH ₄)	See Multiple Emissions Section 2.2.A 0.005 lb/million Btu	15A NCAC 02D .0530 PSD (BACT)

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

- a. Emissions of sulfur dioxide from this source (**ID No. ES12**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combination of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas or No. 2 fuel oil in this source.

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

- a. Visible emissions from this source (**ID No. ES12**) shall not be more than 20 percent opacity 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-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02D .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas or No. 2 fuel oil in this source.

2.2- Multiple Emission Sources Specific Limitations and Conditions

- A. Four simple-cycle internal combustion turbines (ID Nos. ES1 through ES4);
One natural gas-fired fuel gas heater (ID No. ES12); and
One fuel oil fixed-roof storage tank (ID No. ES10)**

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. The following Best Available Control Technology (BACT) limits shall not be exceeded:

Emission Source	Pollutant	Fuel	Emission Limit ^{1,2,3,4}	Control Technology	
four natural gas/No. 2 fuel oil-fired simple cycle combustion turbines (ID Nos. ES1 through ES4)	NO _x (as NO ₂)	natural gas	9 ppmvd ² at 15% O ₂ [24-hour average] ³	dry-low NO _x combustors	
		fuel oil	42 ppmvd ² at 15% O ₂ [24-hour average] ³	water injection	
		all fuels	22,770 pounds/day	n/a	
	CO	natural gas		4 ppmvd at 15% O ₂ at 70 to 100% load	good combustion control practices
				10 ppmvd at 15% O ₂ at 60 to <70% load	
		fuel oil		10 ppmvd at 15% O ₂ at 90 to 100% load	
				20 ppmvd at 15% O ₂ at 80 to <90% load	
			30 ppmvd at 15% O ₂ at 70 to <80% load		
	VOC (as CH ₄)	natural gas		1 ppmvd at 15% O ₂ at 70 to 100% load	good combustion control practices
			5 ppmvd at 15% O ₂ at 60 to <70% load		
fuel oil			10 ppmvd at 15% O ₂		

Emission Source	Pollutant	Fuel	Emission Limit ^{1,2,3,4}	Control Technology
	PM/PM ₁₀ (filterable and condensable)	natural gas	0.0083 lb/million Btu 9.8 lb/hour per turbine	good combustion control practices and use of pipeline-quality natural gas
		fuel oil	0.0646 lb/million Btu 69.0 lb/hour per turbine	good combustion control practices and use of ultra-low sulfur No. 2 fuel oil containing a maximum of 0.0015% by weight (15ppm) sulfur content
		all fuels	3,826.2 lb/day	n/a
fuel gas heater (ID No. ES12)	NOx (as NO ₂)	natural gas	0.01 lb/million Btu	low NOx burners and good combustion control practices
	CO	natural gas	0.08 lb/million Btu	good combustion control practices
	VOC (as CH ₄)	natural gas	0.005 lb/million Btu	
	PM/PM ₁₀ (filterable and condensable)	natural gas	0.0076 lb/million Btu	pipeline-quality natural gas
one fuel storage tank (ID No. ES10)	VOC	N/A	No limit	No requirement

- BACT emission limits shall apply to each source (ID Nos. ES1 through ES4 and ES12) at all times except during the following: Emissions resulting from start-up, shutdown or malfunction above those listed in the table above are permitted provided that optimal operational practices are adhered to and periods of excess emissions are minimized. For the simple cycle combustion turbines (ID Nos. ES1 through ES4), periods of excess emission due to start-up and/or shutdown or operation below 60% load on natural gas or below 70% load on fuel oil shall not exceed two hours in any 24-hour block period beginning at midnight. When natural gas is being burned, start-up is defined as the period from initial firing to 60% load and shutdown is defined as the period from 60% load to flame out. When fuel oil is being burned, start-up is defined as the period from initial firing to 70% load and shutdown is defined as the period from 70% load on fuel oil to flame out.
- ppmvd = parts per million by volume on a dry basis at 15% O₂.
- 24-hour rolling average is calculated using only actual operating hours (periods of zero emissions when not operating are not included). A valid hourly emission rate shall be calculated for each hour in which at least two NOx concentrations are obtained at loads above 60 percent for gas and 70 percent for oil at least 15 minutes apart.
- Compliance with the BACT limits shall be based on a 3-run average of a stack test. Any use of CEMS data for demonstrating compliance with BACT for any pollutants will require reevaluation of applicable BACT limits.

- b. The following emission limits apply in order to demonstrate compliance with the National Ambient Air Quality Standards as required by 15A NCAC 02D .0530; 40 CFR 51.166(k):

AFFECTED SOURCES	POLLUTANTS	EMISSION LIMITS			
		Annual (tons/yr)	lb per 24-hour	lb per 8-hour	lb per 1-hour
four combustion turbines (ID Nos. ES1 through ES4) and one natural gas heater (ID No. ES12)	nitrogen dioxide	1,306			
	carbon monoxide			5,633	704
	particulates/PM ₁₀	235	3,831		

Testing [15A NCAC 02Q .0508(f)]

- c. i. The Permittee has completed the initial performance test (test reference number 2019-341ST).
- ii. If additional emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Sections 2.2 A.1.a or b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Operational Limits [15A NCAC 02Q .0508(b)]

- d. The operation for combustion turbines **(ID Nos. ES1 through ES4)** combined shall not exceed the following limits:
 - i. 26,520,000 million BTUs (12,000 full-load equivalent hours) total per rolling consecutive 12-month period;
 - ii. 8,516,000 million BTUs (4,000 full-load equivalent hours) per rolling consecutive 12-month period when firing No. 2 fuel oil; and
 - iii. 76,644 million BTUs (36 full-load equivalent hours) total per 24-hour block period¹ when firing No. 2 fuel oil.
- e. The operation of each combustion turbine **(ID Nos. ES1 through ES4)** individually shall not exceed 2,129,000 million BTUs (1,000 full load equivalent hours) when firing No. 2 fuel oil during any rolling consecutive 12-month period.
- f. For each 24-hour block period that natural gas is fired in one or more of the turbines within the operation load range defined in Section 2.2 A.1.h, fuel oil combustion in the four combustion turbines **(ID Nos. ES1 through ES4)** combined shall not exceed 59,612 million BTUs (28 full load equivalent hours) total per 24-hour block period.
- g. The Permittee may not burn natural gas in any combustion turbine within the operation load range defined in Section 2.2 A.1.h, during any 24-hour block period that fuel oil firing in all the combustion turbines **(ID Nos. ES1 through ES4)** combined is more than 59,612 million BTUs (28 full load equivalent hours).
- h. Except during periods of start-up, shutdown, or malfunction, the Permittee shall operate the combustion turbines over a load range of 70 to 100% when burning fuel oil and a load range of 60 to 100% when burning natural gas.

¹ A 24-hour block period begins at midnight of each day.

- i. For the simple cycle combustion turbines (**ID Nos. ES1 through ES4**), periods of excess emission due to start-up and/or shutdown or operation below 60% load on natural gas or below 70% load on fuel oil shall not exceed two hours in any 24-hour block period beginning at midnight. When natural gas is being burned, start-up is defined as the period from initial firing to 60% load and shutdown is defined as the period from 60% load to flame out. When fuel oil is being burned, start-up is defined as the period from initial firing to 70% load and shutdown is defined as the period from 70% load on fuel oil to flame out.

Emissions Control [15A NCAC 02Q .0508(b)]

- j. Water injection shall be used to minimize NOx formation when the combustion turbines (**ID Nos. ES1 through ES4**) are burning fuel oil.
- k. Dry low NOx combustors shall be used to minimize NOx formation when the combustion turbines (**ID Nos. ES1 through ES4**) are firing natural gas.
- l. The fuel oil fired in the combustion turbines (**ID Nos. ES1 through ES4**) shall contain a maximum of 0.0015% by weight (15ppm) sulfur content.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- m. The Permittee shall record and maintain records of the actual number of hours of operation and the amounts of each fuel burned each day for each combustion turbine (**ID Nos. ES1 through ES4**) in accordance with 40 CFR Part 75.
- n. The Permittee shall be deemed in non-compliance with 15A NCAC 02D .0530 if the operation of the combustion turbines (**ID Nos. ES1 through ES4**) are not monitored, if an operational limit in Section 2.2 A.1.d through 2.2 A.1.j above is exceeded or if the emission control requirements in Sections 2.2.A.1.k through Section 2.2.A.1.m. are not met

Reporting [15A NCAC 02Q .0508(f)]

- o. The Permittee shall submit summary reports to the Regional Supervisor postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and by July 30 of each calendar year for the preceding six-month period between January and June. The Permittee shall report all excess emissions and monitor downtimes for all periods of operation, including start-up, shutdown, and malfunction.

2.3- Phase II Acid Rain Permit Requirements

ORIS code: 57029

Statement of Basis

1. Statutory and Regulatory Authorities: In accordance with the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended and Titles IV and V of the Clean Air Act, the Department of Environment and Natural Resources, Division of Air Quality issues this permit pursuant to Title 15A North Carolina Administrative Codes, Subchapter 02Q .0400 and 02Q .0500, and other applicable Laws.
2. The SO₂ allowance allocations under Tables 2, 3 or 5 of 40 CFR part 73 and the NO_x requirements for each affected unit are shown in the table below:

Emission Sources	Pollutant	Emission Allowances
four combustion turbines (ID Nos. ES1, ES2, ES3, and ES4)	SO ₂	SO ₂ allowances are not allocated by U.S. EPA for new units under 40 CFR part 72.
	NO _x	Does not apply for gas or oil-fired units.

Phase II Permit Application (attached)

3. The attached Acid Rain Permit Application (dated February 2, 2018), as approved by the Department of Environmental Quality, Division of Air Quality, is part of this permit. The owners and operators of these Phase II acid rain sources must comply with the standard requirements and special provisions set forth in the attached application.

Federal-Enforceable Only

2.4- Cross State Air Pollution Rule (CSAPR) Requirements

1. For the four combustion turbines (**ID Nos. ES1 through ES4**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "CSAPR NO_x Annual Trading Program", Subpart BBBBB "CSAPR NO_x Ozone Season Trading Program", and Subpart CCCCC "CSAPR SO₂ Group 1 Trading Program".

DRAFT

SECTION 3- GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

- A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.
- C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.
- D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:
- Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641
- All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).
- E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect 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 pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; 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.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. 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), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. the Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
The Permittee may make changes in the operation or emissions without revising the permit if:
 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
“**Excess Emissions**” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

“**Deviations**” - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director 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 provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

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 this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable 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.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall

comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. 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.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
 - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized 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.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** 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. 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.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q .0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

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 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 from process operations 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, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the

application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

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ATTACHMENT 1

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
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
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound

ATTACHMENT 2

Acid Rain Permit Application

(revised and dated February 28, 2018)

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