ROY COOPER Governor ELIZABETH S. BISER Secretary MICHAEL ABRACZINSKAS Director



TBD

Mr. William May Power Plant Manager Public Works Commission PO Box 1089 Fayetteville, NC 28302

SUBJECT: Air Quality Permit No. 03029T21 Facility ID: 2600094 Public Works Commission Butler-Warner Generation Plant Fayetteville Cumberland County Fee Class: Title V PSD Class: Major

Dear Mr. May:

In accordance with your completed Air Quality Permit Application for a renewal of your Title V permit, we are forwarding herewith Air Quality Permit No. 03029T21 authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) 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 identified as such in the permit. Please note the requirements for the annual compliance certification are contained in General Condition P in Section 4. 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 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."

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to existing 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



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. William May TBD Page 2

143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Cumberland County has triggered increment tracking under PSD for PM_{10} and SO_2 . However, this permit renewal does not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from *(Enter Permit Issuance Date)* until *(Enter Permit Expiration Date)*, 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 Urva Patel at (919) 707-8405 and <u>Urva.Patel@ncdenr.gov</u>.

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) Fayetteville Regional Office 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 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:

William F. Lane, 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.

Summary of Changes to Permit

| Page No. | Section | Description of Changes |
|--------------|---------------------------|--|
| Cover Letter | N/A | • Updated cover letter with application number, permit numbers, dates, fee class, PSD increment statement, and Director name. |
| Permit Cover | N/A | • Inserted new issuance and complete application date, application number, facility information. |
| 4 | Section 1 Table | • Removed minor modification footnote for emission sources (ID No. GT-1 through GT-8). |
| 5-10 | 2.1.A | • Simplified permit consolidating all requirements of the existing Section 2.1 B into Section 2.1 A. All requirements were identical under both sections. |
| 6 | 2.1 A.3 | This condition allows for the turbines to operate with or without their associated water injection systems. The condition was revised to: Clarify its intent Add recordkeeping consistent with TV permitting policy and requirements Cite the appropriate regulatory authority |
| 7-10 | existing Section 2.1 B | • To simplify the permit and eliminate redundancy the existing Section 2.1 B was consolidated into Section 2.1 A |
| 5 | 2.1 A. Table | • Removed 40 CFR 97, Subpart BBBBB as it no longer |
| 7 | 2.1 C. Table | applies |
| 9 13 | 2.2 A.1 | Removed "Federal-enforceable Only" qualifier |
| 8 | 2.1 B.2 | The NSPS Subpart GG condition for SO₂ was revised as follows: Updated and added correct regulatory references consistent with 02Q .0508(a) Simplified the sulfur dioxide emission limit to the option used by the Permitee (i.e. fuel sulfur limit) Added excess emissions reporting as required by the rule Revised reporting layout to clarify reporting deadlines Added non compliance statements consistent with current DAQ permitting policy |
| 9 | 2.1 B.3 | The NSPS Subpart GG condition for NOx was revised as follows: Updated and added correct regulatory references consistent with 02Q .0508(a) Simplified the NOx emission limit presentation as described in the review Revised reporting layout to clarify reporting deadlines Added non compliance statements consistent with current DAQ permitting policy |
| 10 | 2.1 B.4 | Added a condition addressing 15A NCAC 02D .0614 (CAM). |

The following changes were made to Air Permit No. 03029T21:*

| 11 | 2.2 A.2 | • The fuel oil sulfur limit permit condition was revised substantially to make it consistent with current DAQ TV permitting policy as described in the review. Monitoring, recordkeeping, and reporting was added. |
|--------|-----------|---|
| 11 | 2.2 A.3 | Added a condition addressing the newly applicable 15A NCAC 02D .1425: NOx SIP CALL BUDGET |
| Permit | Section 3 | • Updated General Conditions from version 5.3 to current shell version 6.0 (01/07/2022) |

* This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.



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 |
|------------|------------------------|----------------|-----------------|
| 03029T21 | 03029T20 | XXXX | XXXX |

NOTE: Per General Condition K, a permit application for the renewal of this Title V permit shall be submitted no later than *[enter date six months prior to expiration date]*.

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: | Public Works Commission Butler-Warner Generation Plant |
|--------------------------------------|---|
| | |
| Facility ID: | 2600094 |
| Primary SIC Code: | 4931 |
| NAICS Code: | 221112 |
| Facility Site Location: | 2274 Custer Avenue |
| City, County, State, Zip: | Fayetteville, Cumberland County, North Carolina 28312 |
| Mailing Address: | P.O. Box 1089 |
| City, State, Zip: | Fayetteville, North Carolina 28302 |
| Application Number(s): | 2600094.21A |
| Complete Application Date(s): | June 16, 2021 |
| Division of Air Quality, | Fayetteville Regional Office |
| Regional Office Address: | 225 Green Street, Suite 714 |
| - | Fayetteville, NC 28301 |

Permit issued this the XX day of XXXXX, XXXX.

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

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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 |
| СО | 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 Hazardous Air Pollutant |
| HAP | |
| LAER MACT | Lowest Achievable Emission Rate Maximum Achievable Control Technology |
| NACI | Non-Attainment Area |
| NAAOS | 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 |
| TAP | Toxic Air Pollutant |
| tpy VOC | Tons Per Year Valatile Organic Compound |
| VOC | Volatile Organic Compound |

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

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

| s | Emission Source | an permitted emission sources and associated an | Control Device | Control Device |
|-----------|-----------------|---|----------------|-----------------------|
| Page Nos. | ID No. | Emission Source Description | ID No. | Description |
| 5-6, | GT-1 | One natural gas/No. 2 fuel oil-fired | GT1C-1 | One NOx-reducing |
| 13 | 011 | simple-cycle/combined-cycle turbine | 01101 | water injection |
| 10 | | generator (General Electric Model No. | | system with breech- |
| | | 5001P, 341.1 million Btu per hour | | loaded fuel nozzles |
| | | nominal heat input rate), with exhaust | | (BLFN) installed on |
| | | gas directed through one heat recovery | | the turbine generator |
| | | steam generator (HRSG-2) during | | die teroine generator |
| | | combined-cycle operation or to the | | |
| | | atmosphere through an exhaust stack | | |
| | | during simple-cycle operation | | |
| 5-6, | GT-2 | Two natural gas/No. 2 fuel oil-fired | GT2C-1 | Two NOx-reducing |
| 13 | GT-3 | simple-cycle/combined-cycle turbine | GT3C-1 | water injection |
| 10 | 010 | generators (General Electric Model No. | 01001 | systems with breech- |
| | | 5001P, 341.1 million Btu per hour | | loaded fuel nozzles |
| | | nominal heat input rate each), each with | | (BLFN) installed one |
| | | exhaust gas directed through one heat | | each on the turbine |
| | | recovery steam generator (HRSG-1) | | generators |
| | | during combined-cycle operation or to | | 0 |
| | | the atmosphere through an exhaust stack | | |
| | | during simple-cycle operation | | |
| 7-8, | GT-4 | Two natural gas/No. 2 fuel oil-fired | GT4C-1 | Two NOx-reducing |
| 13 | GT-5* | simple-cycle turbine generators | GT5C-1 | water injection |
| | | (General Electric Model No. 5001P, | | systems installed one |
| | | 341.1 million Btu per hour nominal heat | | each on the turbine |
| | | input rate each) | | generators |
| 5-6, | GT-6 | Two natural gas/No. 2 fuel oil-fired | GT6C-1 | Two NOx-reducing |
| 13 | GT-7 | simple-cycle/combined-cycle turbine | GT7C-1 | water injection |
| | | generators (General Electric Model No. | | systems with breech- |
| | | 5001P, 341.1 million Btu per hour | | loaded fuel nozzles |
| | | nominal heat input rate each), each with | | (BLFN) installed one |
| | | exhaust gas directed through one heat | | each on the turbine |
| | | recovery steam generator (HRSG-3) | | generators |
| | | during combined-cycle operation or to | | |
| | | the atmosphere through an exhaust stack | | |
| | | during simple-cycle operation | | |
| 9-13 | GT-8 | One natural gas/No. 2 fuel oil-fired | GT8C-1 | One NOx-reducing |
| | NSPS GG | simple-cycle/combined-cycle turbine | | water injection |
| | | generator (General Electric Model No. | | system with breech- |
| | | 5001P, 341.1 million Btu per hour | | loaded fuel nozzles |
| | | nominal heat input rate), with exhaust | | (BLFN) installed on |
| | | gas directed through one heat recovery | | the turbine generator |
| | | steam generator (HRSG-2) during | | |
| | | combined-cycle operation or to the | | |
| | | atmosphere through an exhaust stack | | |
| | | during simple-cycle operation | | |

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 turbine generators:

- Five natural gas/No. 2 fuel oil-fired simple-cycle/combined-cycle turbine generators (ID Nos. GT-1 through GT-3, GT-6 and GT-7) each with an associated NOx-reducing water injection system (ID Nos. GT1C-1 through GT3C-1, GT6C-1, and GT7C-1) with breech-loaded fuel nozzles (BLFN) and exhaust gas directed through one of three heat recovery steam generators (HRSG-1 through HRSG-3) during combined-cycle operation or to the atmosphere through an exhaust stack during simple-cycle operation
- Two natural gas/No. 2 fuel oil-fired simple-cycle turbine generators (ID Nos. GT-4 and GT-5) each controlled with one NOx-reducing water injection systems (ID Nos. GT4C-1 and GT5C-1

| Pollutant | Limits/Standards | Applicable Regulation |
|-------------------|--|-------------------------------|
| Sulfur Dioxide | 2.3 pounds per million Btu heat input | 15A NCAC 02D .0516 |
| Visible Emissions | 20 percent opacity | 15A NCAC 02D .0521 |
| Nitrogen Oxides | Recordkeeping for water injection system operation | 15A NCAC 02Q .0508(j) |
| Sulfur Dioxide | No. 2 fuel oil sulfur restriction | 15A NCAC 02D .0605 |
| | See Section 2.2 | |
| | State-enforceable only | 15A NCAC 02D .1425 |
| Nitrogen Oxides | Ozone season annual reporting | |
| | See Section 2.2 | |
| Nitrogen Oxides | Cross State Air Pollution Rule Requirements | 40 CFR Part 97, Subpart AAAAA |
| | See Section 2.2 | |
| Sulfur Dioxide | Cross State Air Pollution Rule Requirements | 40 CFR Part 97, Subpart CCCCC |
| | See Section 2.2 | |

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 (**ID Nos. GT-1 through GT-7**) 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.

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 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

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

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas/No. 2 fuel oil in these sources (**ID Nos. GT-1 through GT-7**).

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

a. Visible emissions from these sources (ID Nos. GT-1 through GT-7) 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 A.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring is required for visible emissions from the firing of natural gas in these sources (**ID Nos. GT-1 through GT-7**).
- d. To ensure compliance, when the cumulative number of hours firing No. 2 fuel oil in each source (ID Nos. GT-1 through GT-7) exceeds more than 950 hours but less than 1,050 hours, the Permittee shall perform a Method 9 test for 1 hour in accordance with a testing protocol approved by the DAQ. Details of the testing and reporting requirements can be found in General Condition JJ. Subsequent Method 9 tests shall be performed on each source for each 950 to 1,050 hours of operation on No. 2 fuel oil thereafter. If these monitoring requirements are not met or the results of a 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.

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

- e. The results of the monitoring 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:
 - i. the date and time of each recorded action;
 - ii. the results of each test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section(s) 2.1 A.2.d and e above 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 deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02Q .0508(j): ALTERNATIVE OPERATING SCENARIOS

a. As the operation of water injection systems (**ID Nos. GT1C-1 through GT7C-1**). are not necessary to achieve compliance with any applicable requirements, the Permittee may operate any of these sources (**ID Nos. GT-1 through GT-7**) without the concurrent operation of its associated water injection system.

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

- b. The following recordkeeping requirements apply:
 - i. The Permittee, contemporaneously with making a change from one alternate operating scenario to another shall record in a logbook (written or electronic format) the scenario under which it is operating.
 - ii. For purposes of Section 2.1 A.3.b.i above, the operating scenarios are as follows:
 - A. operating a source with the concurrent operation of its water injection system or
 - B. operating a source without the concurrent operation of its water injection system.
 - iii. The logbook shall be maintained on-site and made available to an authorized representative upon request. The logbook shall record the date and time when switching from one alternate operating scenario to another.

B. One natural gas/No. 2 fuel oil-fired simple-cycle/combined-cycle turbine generator (ID No. GT-8) with an associated NOx-reducing water injection system (ID No. GT8C-1) with breech-loaded fuel nozzles (BLFN) and exhaust gas directed through heat recovery steam generator (HRSG-1) during combined-cycle operation or to the atmosphere through an exhaust stack during simple-cycle operation

| Pollutant | Limits/Standards | Applicable Regulation |
|-------------------|--|---|
| Visible Emissions | 20 percent opacity | 15A NCAC 02D .0521 |
| Sulfur Dioxide | 0.8 percent weight sulfur in fuel | 15A NCAC 02D .0524 (40 CFR 60, Subpart GG) |
| Nitrogen Oxide | 89 ppmv at 15 percent oxygen | 15A NCAC 02D .0524 (40 CFR 60, Subpart GG) |
| Sulfur Dioxide | No. 2 fuel oil sulfur restriction See Section 2.2 | 15 A NCAC 02D .0605 |
| Nitrogen Oxides | State-enforceable only Ozone season annual reporting See Section 2.2 | 15A NCAC 02D .1425 |
| Nitrogen Oxides | Cross State Air Pollution Rule Requirements See Section 2.2 | 40 CFR Part 97, Subpart AAAAA |
| Sulfur Dioxide | Cross State Air Pollution Rule Requirements See Section 2.2 | 40 CFR Part 97, Subpart CCCCC |

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

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

a. Visible emissions from this turbine generator (**ID No. GT-8**) 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.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

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

- c. No monitoring is required for visible emissions from the firing of natural gas in this source (ID Nos. GT-8).
- d. To ensure compliance, when the cumulative number of hours firing No. 2 fuel oil in this source (**ID Nos. GT-8**) exceeds more than 950 hours but less than 1,050 hours, the Permittee shall perform a Method 9 test for 1 hour in accordance with a testing protocol approved by the DAQ. Details of the testing and reporting requirements can be found in General Condition JJ. Subsequent Method 9 tests shall be performed on each source for each 950 to 1,050 hours of operation on No. 2 fuel oil thereafter. If these monitoring requirements are not met or the results of a 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 .0521.

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

- e. The results of the monitoring 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:
 - i. the date and time of each recorded action;
 - ii. the results of each test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
 - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

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

f. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Sections 2.1 B.1.d and e above 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 deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

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

Emission Limitation [15A NCAC 02Q .0508(b)]

b. The Permittee shall not burn in the stationary gas turbine (**ID No. GT-8**) any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw). [40 CFR 60.333(b)]

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

c. 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 limits given in Section 2.1 B.2.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- d. The following custom fuel monitoring schedule shall apply to this facility. This custom fuel monitoring schedule is contingent on the firing of pipeline quality natural gas by this turbine generator (**ID No. GT-8**). [40 CFR 60.334(i)(3)]
 - i. The natural gas fuel at this site meets the definition of "natural gas" under 40 CFR 60.331(u). Therefore, no sulfur monitoring is required. [40 CFR 60.334(h)(3)]
 - The sulfur content of the fuel oil shall be determined using the following total sulfur methods: ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00, or D1552-01 (all incorporated by reference, see 40 CFR 60.17). [40 CFR 60.334(h)(1), 60.334(b)(1)]
 - iii. The frequency of sulfur content determination for fuel oil shall be conducted using methodologies consistent with Section 2.2.4.2 of Appendix D to Part 75. [40 CFR 60.334(i)]
 - iv. A sample shall be collected after completion of additions and prior to use of oil at each individual storage tank. No additions or blending shall be done to the sampled tank prior to combustion. If additions are made to the tank, then a new sample shall be drawn and analyzed.
 - v. The fuel oil analyses may be performed by the Permittee, a service contractor retained by the Permittee, the fuel oil vendor, or any other qualified agency. [40 CFR 60.334(b)(11)]
 - vi. Records of sample analyses and pertinent fuel oil supplier information shall be retained for a period of five years. This information shall be made available to Division of Air Quality personnel upon request.

If these monitoring and recordkeeping requirements are not met or show an exceedance of the fuel sulfur requirements in Section 2.1 B.2.b above, the Permittee shall be deemed in non-compliance with 15A NCAC 02D .0524.

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

- e. The following reporting requirements apply:
 - i. The Permittee shall submit a summary report of the observations 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. [40 CFR 60.334(j)(5)] All instances of deviations from the requirements of this permit must be clearly identified.
 - ii. The report shall include an excess emissions and monitoring systems performance report. The report shall contain the information required pursuant 40 CFR 60.7(c) and (d). The emissions and monitoring system performance results shall be calculated on a quarterly basis. [40 CFR 60.7(c)] The format for the report will be provided by the DAQ.
 - iii. The periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - (A) 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 gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

- (B) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall 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) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to Section 2.1 B.2.e.i. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.
- (C) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours and ends on the date and hour of the next valid sample.
- [40 CFR 60.335(j)(2)]

If these reporting requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

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

Emission Limitation [15A NCAC 02Q .0508(b)]

b. For this turbine generator (**ID No. GT-8**), the nitrogen oxide emissions shall not exceed 89 parts per million by volume at 15 percent oxygen when firing natural gas or No. 2 fuel oil. [40 CFR 60.332(a)(1)]

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

c. 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.3.b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- d. The following monitoring and recordkeeping requirements apply:
 - i. Monitoring of fuel nitrogen shall not be required while firing natural gas or No. 2 fuel oil in this turbine generator (**ID No. GT-8**). [40 CFR 60.334(h)(2)]
 - ii. The Permittee shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in this turbine generator (**ID No. GT-8**). [40 CFR 60.334(a)]
 - iii. These systems shall be accurate to within +5.0 percent and shall be approved by the Administrator.
 - iv. The Permittee shall develop and keep on-site a parameter monitoring plan, which explains the procedures used to document proper operation of the NOx emission controls. The plan shall include the parameter(s) and acceptable range(s). For affected units that are also subject to 40 CFR 75 and that use the low mass emissions methodology in 40 CFR 75.19 or the NOx emission measurement methodology in Appendix E to 40 CFR 75, the Permittee may meet the requirements of this Section by developing and keeping on-site a quality assurance plan, as described in 40 CFR 75.19(e)(5) or Section 2.3 of Appendix E and Section 1.3.6 of Appendix B to 40 CFR 75.[40 CFR 60.334(g)]

If these monitoring and recordkeeping requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

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

- e. The following reporting requirements apply:
 - i. The Permittee shall submit a summary report of the observations 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. [40 CFR 60.334(j)(5)] All instances of deviations from the requirements of this permit must be clearly identified.
 - ii. The report shall include an excess emissions and monitoring systems performance report. The report shall contain

the information required pursuant 40 CFR 60.7(c) and (d). The emissions and monitoring system performance results shall be calculated on a quarterly basis. [40 CFR 60.7(c)] The format for the report will be provided by the DAQ.

- iii. The periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - (A) Excess emissions shall be any unit operating hour for which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the acceptable water-to-fuel ratio needed to demonstrate compliance with Section 2.1 B.3.b above, as established during the performance test required in 40 CFR 60.8.
 - (B) A period of monitor downtime shall be any unit operating hour in which water is injected into this turbine generator (**ID No. GT-8**), but the essential parametric data needed to determine the water-to-fuel ratio are unavailable or invalid.
 - (C) Each excess emission report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, (if applicable) the nitrogen content of the fuel during each excess emission, and the graphs or figures developed under 40 CFR 60.335(a). The Permittee does not have to report ambient conditions if the Permittee opts to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if the Permittee is not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).
 - [40 CFR 60.335(j)(1)]

If these reporting requirements are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

4. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. The Permittee shall comply with 40 CFR Part 64, pursuant to 15A NCAC 2D .0614, to ensure the combustion turbine (**ID No. GT-8**) and the associated water injection system (**ID Nos. GT8C-1**) comply with the NOx emission standards listed in Sections 2.1 B.3 (NSPS Subpart GG).

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

- b. The following monitoring and recordkeeping requirements apply:
 - i. The Permittee shall install a continuous monitoring device that monitors the water-to-fuel ratio, as required by Section 2.1 B.3.d.ii above.
 - ii. The Permittee shall record continuously:
 - (A) the water-to-fuel ratio, and
 - (B) the fuel consumption.
 - ii. The Permittee shall calculate and record the hourly average water-to-fuel ratio for each turbine.
 - iv. An exceedance shall be defined as a period of excess emissions as defined at Section 2.1 B.3.e.iii.(A) above.
 - v. In the event of any exceedance, the Permittee shall take appropriate action to correct the exceedance as soon as practicable.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if these monitoring and recordkeeping requirements are not met.

Reporting [15A NCAC 2Q .0508(f)]

- c. The Permittee shall submit a summary report of all monitoring and recordkeeping activities required by Sections 2.2 A.4.b above, postmarked on or before January 30 of each calendar year for the preceding sixmonth 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 deviations for the requirements of this permit must be clearly identified. The report shall also include the following information, as applicable:
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of exceedances (including periods of startup, shutdown and malfunctions), as applicable, and the corrective actions taken; and
 - ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).

[40 CFR 64.9]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if these reporting requirements are not met.

2.2 Multiple Emission Source(s) Specific Limitations and Conditions

A. Eight turbine generators (ID Nos. GT-1 through GT-8)

1. CROSS STATE AIR POLLUTION RULE (CSAPR) REQUIREMENTS

For these sources (**ID Nos. GT-1 through GT-8**), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "CSAPR NOx Annual Trading Program and Subpart CCCCC "CSAPR SO₂ Group 1 Trading Program."

2. NO. 2 FUEL OIL SULFUR RESTRICTION

Operating Restriction [15A NCAC 02Q .0508(b)]

At the request of the Permittee, for these sources (**ID Nos. GT-1 through GT-8**), the Permittee shall only combust No. 2 fuel oil that meets the following definition for "ultra-low sulfur No. 2 fuel oil." Ultra-low sulfur No. 2 fuel oil means No. 2 fuel oil that meets the specification ASTM D 396 with a fuel sulfur content that does not exceed 15 parts per million by weight.

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

- b. In accordance with 15A NCAC 02D .0605 "General Recordkeeping and Reporting Requirements" and to ensure the operating restriction in Section 2.2 A.2.a above is met, the following recordkeeping requirements apply:
 - i. The Permittee shall maintain records of fuel oil supplier certifications for each fuel shipment received.
 - ii. Each fuel oil supplier certification shall include the following information:
 - (A) the name of the fuel oil supplier;
 - (B) the maximum sulfur content of the fuel oil; and
 - (C) the method used to determine the maximum sulfur content of the fuel oil.
 - iii. The Permitee shall meet the records retention and availability requirements at General Condition O.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0605 if these monitoring and recordkeeping requirements are not met.

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

c. The Permittee shall submit a summary report of the monitoring and recordkeeping activities given in Section 2.2 A.2.b above 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 deviations from the requirements of this permit must be clearly identified. The report shall include a certified statement signed by the responsible official that only ultra-low sulfur No. 2 fuel oil was fired in these sources (ID Nos. GT-1 through GT-8) during the previous six-month period.

State-enforceable only

3. 15A NCAC 02D .1425: NOX SIP CALL BUDGET

The Permittee shall submit a report to the DAQ no later than January 30 of the calendar year after the NOx SIP Call control period (i.e., May 1 through September 30) listing the NOx emissions from these sources (**ID No. GT-1 through GT-8**) during the NOx SIP Call control period. The NOx emissions in this report shall be determined in accordance with 40 CFR Part 75.

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

| Emission Source ID No. | Emission Source Description ^{1,2} |
|----------------------------|---|
| IVE-1 through IVE-9 | Nine lube oil vapor extractors |
| ICT | Cooling tower |
| ISE3 and ISE4 GACT ZZZZ | Two black start diesel engines (500 horsepower, each) |
| IEFP5 GACT ZZZZ | One emergency diesel-fired fire pump (187 horsepower) |
| ITANK1 through ITANK4 | Four No. 2 fuel oil fixed-roof storage tanks (500,000 gallons storage capacity each) with atmospheric vents |
| ITANK5 through ITANK7 | Three No. 2 fuel oil fixed-roof storage tanks (1,000,000 gallons storage capacity, each) with atmospheric vents |

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.

²When 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 (version 6.0, 01/07/2022)

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(s) 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. Permit 03029T21 Page 14

F. <u>Circumvention</u> - 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. Title V Permit Modifications

- 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.
- 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.
- 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

- Reporting Requirements [15A NCAC 02Q .0508(f)] 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 <u>Reporting Requirements for Excess Emissions [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]</u>

- <u>"Excess Emissions</u>" 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.*)
- 2. 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.
- 3. 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).

I.B <u>Reporting Requirements for Permit Deviations</u> [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

- 1. "<u>Permit Deviations</u>" 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.
- 2. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) quarterly by notifying the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535. 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.C 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 the permit expiration for facilities subject to 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. <u>Need to Halt or Reduce Activity Not a Defense</u> [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 Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all terms and conditions in the permit (including emissions limitations, standards, or work practices), except for conditions identified as being State-enforceable Only. 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;
- 4. the method(s) used for determining the compliance status of the source during the certification period;

- 5. each deviation and take it into account in the compliance certification; and
- 6. as possible exceptions to compliance, any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (CAM) occurred.

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. <u>Termination, Modification, and Revocation of the Permit</u> [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.

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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)(3)]

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(d)]

- 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. National Emission Standards Asbestos - 40 CFR Part 61, Subpart M [15A NCAC 02D .1110]

The Permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

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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, .1110, or .1111 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 for emission sources subject to Rules .0524, .1110, or .1111, the Permittee shall provide and submit all notifications, conduct all testing, and submit all test reports in accordance with the requirements of 15A NCAC 02D .0524, .1110, or .1111, as applicable. Otherwise, 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.
 - Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in 15A NCAC 02D .2600 if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the DAQ to conduct independent tests of any source subject to a rule in 15A NCAC 02D 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 15A NCAC 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(b)(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(c)(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 (Air Permitting Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303 or through the EPA CEDRI) in writing at least seven days before the change is made.
 - a. The written notification shall include:
 - i. a description of the change at the facility;
 - 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.

b. 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 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.