

WESTERN NORTH CAROLINA REGIONAL AIR QUALITY AGENCY

AIR QUALITY PERMIT

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit", and to construct and operate, as outlined in Part II, "Air Quality Construction and Operation Permit", 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 the Western North Carolina Regional Air Quality Agency Air Quality Code (WNCRAQA Code) and is subject to all requirements therein.

Pursuant to WNCRAQA Code Chapter 17, 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 Western North Carolina Regional Air Quality Agency and received an Air Quality Permit, except as provided in this permit.

Permittee:	Duke Energy Progress, Inc. Asheville Steam Electric Plant
Facility ID:	11-628
Facility Site Location:	200 CP&L Drive
City, State, Zip:	Arden, North Carolina 28704
Facility Mailing Address:	200 CP&L Drive
City, State, Zip:	Arden, North Carolina 28704
Permit Number:	11-628-15
Replaces Permit Number:	11-628-10D
Issue Date:	May 11, 2015
Effective Date:	June 1, 2015
Renewal Application Due Date:	August 31, 2019
Expiration Date:	May 31, 2020

David A. Brigman, Director

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PART I - AIR QUALITY TITLE V OPERATION PERMIT

The Western North Carolina Regional Air Quality Agency (WNCRAQA), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in Part I of this permit unless otherwise specified.

Under WNCRAQA Code Chapter 17, the operation of emission source(s) and associated air pollution control device(s) listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

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

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

Emission Source ID	Emission Source Description	Control Device ID	Control Device Description
Unit 1 Boiler	One (1) 2,155 million BTU per hour (nominally rated) Riley Stoker pulverized coal-fired boiler equipped with low NO _x burners and alkaline-based fuel additive ¹	Unit 1 SCR	One (1) selective catalytic reduction system ²
		Unit 1 ESP	One (1) electrostatic precipitator
		Unit 1 FGD	One (1) flue gas desulfurization system ³
Unit 2 Boiler	One (1) 2,102 million BTU per hour (nominally rated) Babcock & Wilcox pulverized coal-fired boiler equipped with low NO _x burners and alkaline-based fuel additive ¹	Unit 2 SCR	One (1) selective catalytic reduction system ²
		Unit 2 ESP	One (1) electrostatic precipitator
		Unit 2 FGD	One (1) flue gas desulfurization system ³
Unit 3 IC Turbine	One (1) 1,929 million BTU per hour (nominally rated) General Electric natural gas / No. 2 fuel oil-fired simple cycle internal combustion turbine	NA	NA
Unit 4 IC Turbine	One (1) 1,929 million BTU per hour (nominally rated) General Electric natural gas / No. 2 fuel oil-fired simple cycle internal combustion turbine	NA	NA
Limestone Crusher	One (1) 150-ton per hour crusher	LC-BF-1	One (1) bagfilter

¹ Alkaline-based fuel additive may be used on an as-needed basis not to exceed 4 pounds per ton of coal burned. Fuel additives shall not contain any toxic air pollutants listed in WNCRAQA Code 17.0711. Fuel additive products not equivalent to those specified in the Application Addendum dated November 4, 2010 are not allowed without a permit modification.

² For ozone season NO_x control and compliance with the North Carolina Clean Smokestacks Act (SB 1078 – Air Quality / Electric Utilities Bill). To be operated on an as needed basis. A sulfur trioxide (SO₃) mitigation system can be used when needed in conjunction with each SCR.

³ For compliance with the North Carolina Clean Smokestacks Act (SB 1078 – Air Quality / Electric Utilities Bill). To be operated on an as-needed basis.

Emission Source ID	Emission Source Description	Control Device ID	Control Device Description
Limestone Conveyor 1	One (1) 150-ton per hour belt conveyor measuring 270 feet x 24 inches	NA	NA
Limestone Conveyor 2	One (1) 150-ton per hour belt conveyor measuring 408 feet x 24 inches	CONV-BF-2	One (1) bagfilter
Limestone Conveyor 3	One (1) 150-ton per hour belt conveyor measuring 44 feet x 24 inches	NA	NA
Limestone Bin 1	One (1) 400-ton capacity storage bin	LDB-BF-1	One (1) bagfilter
Limestone Bin 2	One (1) 400-ton capacity storage bin	LDB-BF-2	One (1) bagfilter
Sorbent 1	One (1) 40-50-ton capacity sorbent receiving trailer	SORB-DC-1	One (1) dust collector controlling Sorbent 1 and Sorbent 2
Sorbent 2	One (1) approximately 18-ton capacity sorbent metering trailer		
Emergency Generator 1	One (1) diesel-fired emergency-use generator with a rated output capacity of 380 horsepower	NA	NA
Fire Pump Engine 1	One (1) diesel-fired emergency-use fire pump engine with a rated output capacity of 370 horsepower	NA	NA

SECTION 2 - SPECIFIC CONDITIONS AND LIMITATIONS

The emission sources and associated air pollution control devices listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

2.1 - Emission Source ID Unit 1 Boiler & Unit 2 Boiler

The following table provides a summary of limits and standards for the emission sources referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
Sulfur dioxide	26,880 pounds per 24-hour block period for Unit 1 Boiler 26,880 pounds per 24-hour block period for Unit 2 Boiler	WNCRAQA Code 4.0501(c)
	2.3 pounds per million BTU heat input	WNCRAQA Code 4.0516
	Clean Air Interstate Rule (CAIR) requirements (see Section 3)	WNCRAQA Code 4.2400
	Phase II Acid Rain Permit Requirements (see Section 4)	WNCRAQA Code 17.0402

Regulated Pollutant	Limits / Standards	Applicable Regulation
Nitrogen oxides	When burning only oil or natural gas - 0.8 pounds per million BTU heat input; When burning only coal - 1.8 pounds per million BTU heat input; When burning both coal and oil or natural gas in combination - as calculated by the equation $E = [(Ec)(Qc) + (Eo)(Qo)] / Qt$, where: E = emission limit in pounds per million BTU heat input Ec = 1.8 pounds per million BTU heat input Eo = 0.8 pounds per million BTU heat input Qc = coal heat input in BTU per hour Qo = oil and gas heat input in BTU per hour Qt = Qc + Qo	WNCRAQA Code 4.0519
Nitrogen oxides	Clean Air Interstate Rule (CAIR) requirements (see Section 3)	WNCRAQA Code 4.2400
	Phase II Acid Rain program requirements (see Section 4)	WNCRAQA Code 17.0402
Visible emissions	40 percent opacity	WNCRAQA Code 4.0521
	Local-enforceable only: Unit 1 Boiler - 10 percent annual average opacity; Unit 2 Boiler - 5 percent annual average opacity	WNCRAQA Code 4.0536
Particulate matter	0.12 pounds per million BTU heat input	WNCRAQA Code 4.0536
Mercury	See Section 2.1(J)	WNCRAQA Code 4.2500
Excess emissions	Malfunction abatement plan	WNCRAQA Code 4.0535
Various	As defined in specific condition	WNCRAQA Code 4.0530(u)
Hazardous Air Pollutants	As defined in specific condition	WNCRAQA Code 4.1111 (40 CFR 63, Subpart UUUUU)
Toxic air pollutants	Local-enforceable only: Recycled oil specifications	WNCRAQA Code 17.0700
	Local-enforceable only: Unit 1 Boiler - Waste oils / solvents specifications	
	Local-enforceable only: Boiler tube cleaning solution specifications	

(A) WNCRAQA CODE 4.0501(c) – COMPLIANCE WITH NATIONAL AMBIENT AIR QUALITY STANDARDS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0501(c)]
Emissions of sulfur dioxide from the Unit 1 Boiler shall not exceed 26,880 pounds per 24-hour block period. Emissions of sulfur dioxide from the Unit 2 Boiler shall not exceed 26,880 pounds per 24-hour block period.
- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0608(e) & 17.0508(f)]
To assure compliance with the limitation given in Section 2.1(A)(1) above, the Permittee shall

determine sulfur dioxide emissions for each boiler in pounds per 24-hour block period using a CEMS meeting the requirements of 40 CFR Part 75, except that the data reported shall not include data substituted using the missing data procedures in Subpart D of 40 CFR 75, nor shall the data have been bias adjusted according to the procedures of 40 CFR Part 75. Compliance with the sulfur dioxide emission limitation shall be determined by summing the hourly CEMS values for each boiler in pounds of sulfur dioxide over a 24-hour block period beginning at midnight. The minimum number of data points, shall be determined by 40 CFR Part 75. If any 24-hour block total exceeds the mass emissions limits given in Section 2.1(A)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0501(c).

(3) **Reporting** [WNCRAQA Code 4.0608(h)(2) & 17.0508(f)]

The Permittee shall submit the CEMS data showing the 24-hour daily block values for each boiler in pounds of sulfur dioxide per 24-hour for each 24-hour block period during the reporting period no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

(4) **Reporting/CEMS Availability** [WNCRAQA Code 4.0608(h)(2) & 17.0508(f)]

The Permittee shall submit sulfur dioxide CEMS downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September.

(B) **WNCRAQA CODE 4.0516 - SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES**

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0516 & 17.0508(b)]

Emissions of sulfur dioxide from each source 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.

(2) **Testing** [WNCRAQA Code 4.2611]

No testing is required at this time; however, WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2611 and General Condition JJ. If the results of this test are above the limit given in Section 2.1(B)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0516.

(3) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0608(e) & 17.0508(f)]

To assure compliance with the limitation given in Section 2.1(B)(1) above, the Permittee shall determine sulfur dioxide emissions in pounds per million BTU using a CEMS meeting the requirements of 40 CFR Part 75, except that unbiased values may be used (missing data shall be filled in accordance with 40 CFR Part 75). Compliance with the sulfur dioxide emission limitation shall be determined by averaging hourly CEMS values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values (missing data shall be filled in accordance with 40 CFR Part 75) shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If any 24-hour block average exceeds the limitation given in Section 2.1(B)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0516.

(4) **Reporting** [WNCRAQA Code 4.0608(h)(2) & 17.0508(f)]

The Permittee shall submit the CEMS data showing the 24-hour daily block values in pounds per million Btu for each 24-hour daily block averaging period during the reporting period no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

(5) **Reporting/CEMS Availability** [WNCRAQA Code 4.0608(h)(2) & 17.0508(f)]

The Permittee shall submit sulfur dioxide CEMS downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September.

(C) **WNCRAQA CODE 4.0519 - CONTROL OF NITROGEN DIOXIDE AND NITROGEN OXIDES EMISSIONS**

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0519 & 17.0508(b)]

Emissions of nitrogen oxides from each source shall not exceed 0.8 pounds per million BTU heat input when combusting oil or natural gas alone. Emissions of nitrogen oxides from these sources shall not exceed 1.8 pounds per million BTU heat input when combusting coal alone. Emissions of nitrogen oxides from these sources when combusting both coal and oil or natural gas in combination shall not exceed the limit calculated by the following equation:

$$E = [(Ec)(Qc) + (Eo)(Qo)] / Qt,$$

where: E = emission limit for combination in pounds per million BTU
Ec = 1.8 pounds per million BTU heat input for coal only
Eo = 0.8 pounds per million BTU heat input for oil or natural gas
Qc = actual coal heat input to the combination in BTU per hour
Qo = actual oil and natural gas heat input to the combination in BTU per hour
Qt = Qc + Qo.

(2) **Testing** [WNCRAQA Code 4.2612]

No testing is required at this time; however, WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2612 and General Condition JJ. If the results of this test are above the limit given in Section 2.1(C)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0519.

(3) **Monitoring** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

To assure compliance with the limitations given in Section 2.1(C)(1) above, the Permittee shall determine nitrogen oxide emissions in pounds per million BTU using a CEMS meeting the requirements of 40 CFR Part 75, except that unbiased values may be used (missing data shall be filled in accordance with 40 CFR Part 75). Compliance with the nitrogen oxides emission limitations shall be determined by averaging hourly CEMS values over a 24-hour block period beginning at midnight. To compute the 24-hour block average, the average hourly values (missing data shall be filled in accordance with 40 CFR Part 75) shall be summed, and the sum shall be divided by 24. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75.

For monitoring purposes, the following emission limits apply:

- (a) When only coal is burned, the emission limit shall be 1.8 pounds per million BTU heat input;
- (b) When only oil or natural gas is burned, the emission limit shall be 0.8 pounds per million BTU heat input; or
- (c) When oil or natural gas is burned other than for startup and for periods greater than 24 hours, the emission limit shall be calculated according to the equation in Section 2.1(B)(1) above.

If any 24-hour block average exceeds the limitations given in Section 2.1(C)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0519.

(4) **Recordkeeping** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

Records (written or electronic format) of monthly coal, oil, and natural gas consumption shall be maintained onsite and made available to an authorized WNCRAQA representative upon request.

(5) **Reporting** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

The Permittee shall submit the CEMS data showing the 24-hour daily block values in pounds per million Btu for each 24-hour daily block averaging period during the reporting period no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

(6) **Reporting/CEMS Availability** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

The Permittee shall submit nitrogen oxide CEMS downtime reports, including monitor availability values (as calculated for 40 CFR Part 75) for the last hour of the reporting period, no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September.

(D) WNCRAQA CODE 4.0521 - CONTROL OF VISIBLE EMISSIONS

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0521(c) & 17.0508(b)]

Visible emissions from each source shall not exceed 40 percent opacity when averaged over a six-minute period.

(2) **Testing** [WNCRAQA Code 4.2610]

No testing is required at this time; however, WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2610 and General Condition JJ. If the results of this test are above the limit given in Section 2.1(D)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0521.

(3) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0521(g), 4.0606, 4.0612, & 17.0508(f)]

To assure compliance with the limitation given in Section 2.1(D)(1) above, the Permittee shall either:

- install, maintain, and operate a COMS for measuring the opacity of emissions (and follow the COMS Monitoring Option), or

- install, maintain, and operate a PM CEMS (and follow the PM CEMS Monitoring Option).

The Permittee shall submit a written notification to the WNCRAQA at least 30 days before changing the compliance monitoring option.

(a) **COMS Monitoring Option**

When using this option, the Permittee shall determine opacity using a COMS meeting the requirements of Appendix P of 40 CFR Part 51 and/or 40 CFR Part 75. Compliance with the opacity limitation shall be calculated using six-minute averages of the COMS values. Excluding startups, shutdowns, maintenance periods when fuel is not being combusted, and malfunctions approved as such according to procedures approved under WNCRAQA Code 4.0535:

- (i) No more than 4 six-minute periods shall exceed the opacity limitation in any one day; and
- (ii) The percent of excess emissions (defined as the percentage of monitored operating time in a calendar quarter above the opacity limit) shall not exceed 0.8 percent of the total operating hours. If a source operates less than 500 hours during a calendar quarter, the percent of excess emissions shall be calculated by including hours operated immediately previous to this quarter until 500 operational hours are obtained.

(b) **PM CEMS Monitoring Option**

When using this option, opacity shall be measured by conducting Method 9 performance tests in accordance with §60.45(b)(7) following the schedule in §60.45(b)(7)(i). Records shall be maintained according to the requirements specified in §60.45(h)(1) for all Method 9 performance tests required. The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0521 if the monitoring is not performed, if the monitored values exceed the limitations given above, or if the records are not maintained. For the purposes of this condition, it is not necessary to submit a testing protocol prior to the scheduled test date, as specified in General Condition JJ, if no changes are being made to the most recently approved previous protocol used for Method 9 testing under this condition. If the most recently approved previous protocol is to be used for testing, it shall be submitted with the test report. Excluding startups, shutdowns, maintenance periods when fuel is not being combusted, and malfunctions approved as such according to procedures approved under WNCRAQA Code 4.0535:

- (i) No six-minute period shall exceed 90 percent opacity;
- (ii) No more than 1 six-minute period shall exceed the opacity limitation in any one hour; and
- (iii) No more than 4 six-minute periods shall exceed the opacity limitation in any one day.

(4) **Reporting** [WNCRAQA Code 4.0606 & 17.0508(f)]

(a) **COMS Monitoring Option**

When using this option, the Permittee shall submit excess emissions and monitor downtime reports as required under Appendix P of 40 CFR Part 51 no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. For periods of excess emissions, defined as each six-minute period average greater than 40 percent opacity, the opacity measurements recorded by the COMS shall be reported as described in Paragraphs 4.0 and 5.1 of Appendix P of 40 CFR Part 51 except that a six-minute time period shall be deemed as an appropriate alternative opacity averaging

period as described in Paragraph 4.2 of Appendix P of 40 CFR Part 51. A minimum of 36 data points, equally spaced, is required to determine a valid six-minute value. All instances of deviations from the requirements of this permit must be clearly identified.

(b) **PM CEMS Monitoring Option**

When using this option, the Permittee shall report the results of all Method 9 performance tests (required during the reporting period per the schedule in §60.45(b)(7)(i)) with the excess emissions and monitoring system performance reports no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September.

(E) **WNCRAQA CODE 4.0536 - PARTICULATE EMISSIONS FROM ELECTRIC UTILITY BOILERS (ANNUAL AVERAGE OPACITY REQUIREMENTS - LOCAL-ENFORCEABLE ONLY)**

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0536(b) & 17.0508(b)]

In addition to the limit given in Section 2.1(D)(1) above, visible emissions from the utility boiler units shall not exceed the following annual average opacity limits:

- Unit 1 Boiler - 10 percent; and
- Unit 2 Boiler - 5 percent.

(2) **Testing** [WNCRAQA Code 4.2609]

No testing is required at this time; however, WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2609 and General Condition JJ. If the results of this test are above the limit given in Section 2.1(E)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0536.

(3) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0536(g) & 17.0508(f)]

To assure compliance with the limitation given in Section 2.1(E)(1) above, the Permittee shall follow either the COMS Monitoring Option or the PM CEMS Monitoring Option (described in Section 2.1(C)(3)).

(a) **COMS Monitoring Option**

When using this option, the Permittee shall determine opacity using a COMS meeting the performance specifications of Appendix B of 40 CFR Part 60. Each day an annual average opacity value shall be calculated for each unit for the most recent 365-day period ending with the end of the previous day. The average is the sum of the measured non-overlapping six-minute averages of opacity determined only while the unit is in operation divided by the number of such measured non-overlapping six-minute averages. Startup, shutdown, and non-operating time shall not be included in the annual average opacity calculation, but malfunction time shall be included.

(b) **PM CEM Monitoring Option**

When using this option, the Permittee shall calculate each day an annual average opacity value for the most recent 365-day period ending with the end of the previous day. The average is the sum of the measured non-overlapping one-hour averages of opacity determined only while the unit is in operation divided by the number of such measured non-overlapping one-hour averages. Start-up, shut-down, and non-operating time shall not be included in the annual average opacity calculation, but malfunction time shall be included. The hourly opacity values shall be determined using the PM CEMS hourly average output values as

follows:

$$\text{Opacity, average for each hour} = \frac{(\text{Actual PM CEMS Output, average for each hour})(Z, \text{Opacity})}{(Y, \text{mg} / \text{m}^3)}$$

where: Y = The PM CEMS output value (mg/m³) established during the initial PM CEMS PS-11 certification procedure that corresponds to 0.03 lb PM/MMBtu

Z = 5% opacity

- (c) For periods of less than 365 days of operation using either the COM Monitoring Option or the PM CEMS Monitoring Option exclusively, the AAO shall be calculated as follows:

$$\text{AAO} = \frac{\sum_{i=1}^Z (6 \text{ minute COMS block } i) + \left(\sum_{j=1}^Y (1 \text{ hour PM CEMS block } j) (10 \text{ six - minute blocks} / 1 \text{ hour block}) \right)}{Z + 10Y}$$

where: Z = Number of six-minute COM blocks of data within the 365-day look-back period

Y = Number of one-hour PM CEMS blocks of data within the 365-day look-back period

Note: 6 minute COMS block i and 1 hour PM CEMS block j refer to the opacity measurements determined from the COMS and PM CEMS, respectively.

(4) **Reporting** [WNCRAQA Code 4.0536(b) & 17.0508(f)]

(a) **COM Monitoring Option**

When using this option, the Permittee shall submit a report by the 30th day following the end of each month showing, for each day of the previous month, the calculated annual average opacity of each unit and the annual average opacity limit.

(b) **PM CEM Monitoring Option**

When using this option, the Permittee shall submit a report showing the calculated annual average opacity of each unit and the annual average opacity limit for each day during the reporting period no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

Quarterly excess emissions reports shall be used as an indication of good operation and maintenance of the electrostatic precipitators. These sources shall be deemed to be properly operated and maintained if the calculated one-hour average PM concentrations (mg/m³) exceed the concentration (mg/m³) corresponding to 0.03 pounds per million Btu heat input less than 3.0 percent of the total operating time, adjusted for monitor downtime, for any given calendar quarter. In addition, these sources shall be deemed to be properly operated and maintained if monitor downtime does not exceed 25 percent (10 percent beginning on January 1, 2012) for any given calendar quarter. If monitor downtime is greater than 2 percent for any given calendar quarter, the Permittee shall provide a full explanation in the

quarterly excess emissions report, including actions taken to reduce monitor downtime to below 2 percent.

(F) WNCRAQA CODE 4.0536 - PARTICULATE EMISSIONS FROM ELECTRIC UTILITY BOILERS (PARTICULATE MATTER REQUIREMENTS)

(1) Emission Limitation/Standard [WNCRAQA Code 4.0536(b) & 17.0508(b)]

Emissions of particulate matter from each utility boiler unit shall not exceed 0.12 pounds per million BTU of heat input.

(2) Testing [WNCRAQA Code 4.2609 & 4.0536(e)]

The Permittee shall produce each year for each unit at least one stack test for particulate matter in accordance with Method 5B of Appendix A of 40 CFR Part 60 and General Condition JJ. In the event that a boiler exceeds 80 percent of its particulate emission limit during the stack test, the Permittee shall schedule and conduct another stack test within 6 months. Upon demonstration that the source is operating under 80 percent of its particulate limit, as shown by three consecutive semiannual stack tests, the source may resume annual stack tests. If the results of any test are above the limit given in Section 2.1(F)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0536.

(3) Monitoring/Recordkeeping [WNCRAQA Code 4.0614 & 17.0508(f)]

In addition to the stack test required in Section 2.1(F)(2) above, to provide a reasonable assurance of compliance with the limitation given in Section 2.1(F)(1) above, the Permittee shall follow either the COMS Monitoring Option or the PM CEMS Monitoring Option (described in Section 2.1(D)(3)).

(a) COM Monitoring Option

When using this option, the Permittee shall determine opacity using a COMS meeting the requirements of Appendix P of 40 CFR Part 51 and/or 40 CFR Part 75. Any opacity value in excess of the following indicator ranges shall be deemed an excursion as defined in 40 CFR Part 64:

- Unit 1 Boiler - 14 percent; and
- Unit 2 Boiler - 9 percent

The appropriate averaging period for which an excursion shall be determined is each 3-hour block average of six-minute opacity averages beginning at midnight (total of eight 3-hour block periods each day). Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for data averages and calculations. The Permittee shall use all the data collected during all other periods in assessing the operation of the ESP.

For any excursion, the Permittee shall initiate an inspection of the control equipment and/or COMS, as appropriate, and make any necessary repairs. In addition to implementing procedures outlined in the malfunction abatement plan required under WNCRAQA Code 4.0535, the following corrective actions shall be taken:

- (i) Control operator shall notify the shift supervisor or responsible official (plant manager or representative) in accordance with plant procedures;
- (ii) System dispatcher shall be alerted if load reductions are anticipated;
- (iii) The following operating practices and procedures shall be initiated as necessary:
 - Identify cause of excursion;

- Isolate ESP field or increase power input to other fields if necessary;
- Reduce load, as necessary, to help minimize emissions;
- Proceed to shutdown or confirm malfunction conditions exist if emissions can not be controlled appropriately;
- Initiate work order for ESP inspection and repair as needed;

(iv) Nature and cause of excursion shall be documented in operations log;

(v) Provide notification to WNCRAQA as necessary.

If 5 percent or greater of COMS data (excluding startup, shutdown, and malfunction periods) recorded in a calendar quarter exceed the opacity values listed above, a stack test shall be performed in the following calendar quarter to demonstrate compliance with the limitation given in Section 2.1(F)(1) above. In the event that a unit exceeds 80 percent of its particulate emission limit during the stack test, the Permittee shall schedule and conduct another stack test within 6 months. Upon demonstration that the source is operating under 80 percent of its particulate limit, as shown by three consecutive semiannual stack tests, the source may resume annual stack tests. If a source operates less than 2,200 hours during any quarter, the source may evaluate 3-hour opacity values using operating data for the current quarter and the preceding quarters until 2,200 hours of data are obtained. If the result of any stack test is greater than any limit given in Section 2.1(F)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0536.

(b) **PM CEM Monitoring Option**

When using this option, compliance with the particulate limit in Section 2.1(F)(1) shall be determined using the PM CEMS. A measured exceedance of 0.10 pounds per million Btu of heat input (24-hour daily arithmetic average) shall be a violation of the corresponding emission standards in Section 2.1(E)(1).

- (i) Each PM CEMS shall meet the requirements of Performance Specification PS-11 of Appendix B of 40 CFR Part 60, and shall be installed, evaluated, operated, and maintained according to the applicable requirements in §60.49Da(v), §§60.45(b)(5), (b)(7), and (g)(4). The Permittee shall have on file with the Director an approved quality assurance program, and shall submit to the director within the time period of his request for his approval a revised quality assurance program to include the provisions of 40 CFR 60, Appendix F, Procedure 2 for the PM CEMS.
- (ii) The initial performance evaluation shall be completed no later than 180 days after the date of notification to the WNCRAQA of the first instance the Permittee selects the compliance PM CEMS Monitoring Option.
- (iii) The PM emission rate shall be determined based on a 24-hour daily (block) average of the hourly arithmetic average emissions concentrations using the CEMS outlet data each boiler operating day, except for data obtained during startup, shutdown, and malfunction. Averages are only calculated for boiler operating days that have valid data for at least 18 hours of unit operation during which the standard applies. All valid hourly emission rates on operating days not meeting the minimum 18-hour requirement shall be averaged with all of the valid hourly emission rates of the next boiler operating day meeting the minimum 18-hour requirement. The 24-hour block arithmetic average emission concentration shall be calculated using EPA Reference Method 19 of Appendix A of 40 CFR Part 60, section 12.4.1.

- (iv) At a minimum, valid PM CEMS hourly averages shall be obtained for 75 percent of all operating hours on a 30-day rolling average basis. Beginning on January 1, 2012, valid PM CEMS hourly averages shall be obtained for a minimum of 90 percent of all operating hours on a 30-day rolling average basis. At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (v) The 1-hour arithmetic averages of PM CEMS data shall be expressed in pounds per million Btu and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of Subpart A of 40 CFR Part 60.
 - (vi) All valid PM CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph iv above are not met.
 - (vii) When PM emissions data are not obtained because of PM CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the WNCRAQA or EPA Reference Method 19 of Appendix A of 40 CFR Part 60 to provide, as necessary, valid emissions data for a minimum of 90 percent (only 75 percent is required prior to January 1, 2012) of all operating hours per 30-day rolling average.
- (4) **Reporting** [WNCRAQA Code 4.0536(b), 4.0614, & 17.0508(f)]
The results of any stack test required in Section 2.1(F)(2) above shall be reported within 30 days, and the test report shall be submitted within 60 days after the test. All instances of deviations from the requirements of this permit must be clearly identified.
- (a) **COMS Monitoring Option**
When using this option, the results of any stack test required in Section 2.1(F)(3) above shall be reported within 30 days, and the test report shall be submitted within 60 days after the test. In addition, the Permittee shall submit the following reports as required under §64.9 of 40 CFR Part 64 no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September:
 - (i) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, 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).
 - (b) **PM CEMS Monitoring Option**
When using this option, the Permittee shall submit excess emissions and monitoring system performance reports for PM no later than January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. The report shall include, at a minimum, the information required in 40 CFR 60.7(c) and shall include all 24-hour daily (block) average excess emissions (pounds per million Btu) using the CEMS outlet data, including periods exempted during startup, shutdown, and malfunction. Within 15 days of a written request, report **all** PM CEMS hourly averages (in written or electronic form) to show, at a minimum, that valid PM CEMS hourly averages have been obtained for 90 percent

(only 75 percent is required prior to January 1, 2012) of all operating hours on a 30-day rolling average basis.

(G) WNCRAQA CODE 4.0535 - EXCESS EMISSIONS REPORTING AND MALFUNCTIONS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0535(d) & 17.0508(b)]
All electric utility boiler units shall have a malfunction abatement plan approved by the Director as specified in WNCRAQA Code 4.0535(d).
- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0535(d) & 17.0508(f)]
The Permittee shall maintain logs to show that the operation and maintenance sections of the malfunction abatement plan are implemented. These logs (written or electronic format) shall be maintained onsite and made available to an authorized WNCRAQA representative upon request.

(H) WNCRAQA CODE 4.1111 - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT - 40 CFR PART 63 SUBPART UUUUU)

The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with WNCRAQA Code 4.1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40CFR Part 63, Subpart UUUUU.

(I) WNCRAQA CODE 17.0700 - TOXIC AIR POLLUTANT PROCEDURES (RECYCLED OIL SPECIFICATIONS - LOCAL-ENFORCEABLE ONLY)

- (1) **Emission Limitation/Standard** [WNCRAQA Code 17.0317(a)(8), 17.0700, & 17.0508(b)]
In order to preclude applicability of WNCRAQA Code 17.0700 for sources of toxic air pollutants, any recycled oil combusted in either Unit 1 Boiler or Unit 2 Boiler to replace No. 2 fuel oil for light-off and flame stabilization shall be shown equivalent to unadulterated fossil fuel prior to combustion by meeting the following criteria:

Constituent / Property	Allowable Level
Arsenic	1 ppm maximum
Cadmium	2 ppm maximum
Chromium	5 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum
Sulfur	1.0% maximum
Ash	1.0% maximum

The Permittee is responsible for ensuring that the recycled oil meets the approved criteria for unadulterated fuel. The Permittee is held responsible for any discrepancies discovered by WNCRAQA as a result of any sampling and analysis of the oil.

- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 17.0317(b) & 4.0605]
The Permittee shall maintain at the facility for a minimum of three years, and shall make available to an authorized WNCRAQA representative upon request, accurate records of the following:
 - (a) The actual amount of recycled oil delivered to, and combusted at the facility on an annual basis; and
 - (b) Each load of recycled fuel oil received shall include the following:
 - (i) A delivery manifest document clearly showing the shipment content and amount, its

place and date of loading, and place and date of destination;

- (ii) A batch specific analytical report that contains an analysis for all constituents/properties listed above. Analytical results of the samples representative of the recycled oil shipment from the vendor shall be no more than one year old when received;
- (iii) Batch signature information consisting of the following: a batch number, tank identification with batch volume of recycled oil, date and time the batch completed treatment, and volume(s) delivered; and
- (iv) A certification indicating that the recycled fuel oil does not contain detectable PCBs (< 2 ppm).

WNCRAQA reserves the right to require additional monitoring and/or recordkeeping of the recycled oil without notice.

(3) **Reporting** [WNCRAQA Code 17.0317(b) & 17.0508(f)]

The Permittee shall submit a summary report of the total recycled oil combusted and the results of the analytical testing by 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.

(J) **WNCRAQA CODE 17.0700 - TOXIC AIR POLLUTANT PROCEDURES (WASTE OILS / SOLVENTS SPECIFICATIONS - LOCAL-ENFORCEABLE ONLY)**

(1) **Emission Limitation/Standard** [WNCRAQA Code 17.0317(a)(8), 17.0700 & 17.0508(b)]

In order to preclude applicability of WNCRAQA Code 17.0700 for sources of toxic air pollutants, waste oils (either petroleum-derived or synthetic, used as a lubricant, hydraulic fluid, metal working fluid, insulating fluid, or coolant) and solvents (including acetone, methanol, methyl ethyl ketone, toluene, varsol, xylene, and waste solvent mixtures containing less than 10 percent (by volume) of any non-halogenated solvent not listed above as referenced by 40 CFR 261.31) shall only be combusted in Unit 1 Boiler as a waste disposal method according to the following conditions and stipulations:

- (a) Only those waste oils / solvents generated at the Asheville, Marshall, or Walters sites may be combusted;
- (b) No more than 100 gallons of plant employees used oil may be combusted in any calendar year;
- (c) Total halogen content shall not exceed 1,000 micrograms per gram (parts per million);
- (d) Total lead content shall not exceed 250 micrograms per gram (parts per million);
- (e) Total PCB content of any insulating fluid or coolant shall not exceed 49 parts per million;
- (f) Waste oils / solvents shall not be combusted during periods of startup, shutdown, or malfunction; and
- (g) Total waste oils / solvents feed rate shall not exceed 300 gallons per hour and 10,000 gallons per calendar year.

(2) **Monitoring/Recordkeeping** [WNCRAQA Code 17.0317(b) & 17.0508(f)]

The Permittee shall conduct monitoring/recordkeeping according to the following:

- (a) A daily record of the amount of waste oils / solvents combusted shall be maintained onsite and made available to an authorized WNCRAQA representative upon request; and
 - (b) Chemical analysis conducted on waste oils / solvents combusted shall be maintained onsite and made available to an authorized WNCRAQA representative upon request.
- (3) **Reporting** [WNCRAQA Code 17.0317(b) & 17.0508(f)]
The Permittee shall submit a summary report of the amount of waste oils / solvents combusted by January 30 of each calendar year for the preceding twelve-month period between January and December.

(K) WNCRAQA CODE 17.0700 - TOXIC AIR POLLUTANT PROCEDURES (BOILER TUBE CLEANING SOLUTION SPECIFICATIONS - LOCAL-ENFORCEABLE ONLY)

- (1) **Emission Limitation/Standard** [WNCRAQA Code 17.0317(a)(8), 17.0700 & 17.0508(b)]
In order to preclude applicability of WNCRAQA Code 17.0700 for sources of toxic air pollutants, any boiler tube cleaning solution (such as ammonia / citric acid , ammoniated EDTA, ammonium persulfate, or similar materials upon request and approval of the Director) evaporated in either Unit 1 Boiler or Unit 2 Boiler shall be limited to a 145-gallon per minute maximum injection rate.
- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 17.0317(b) & 17.0508(f)]
A daily record of the amount of boiler tube cleaning solution injected in each boiler shall be maintained onsite and made available to an authorized WNCRAQA representative upon request.
- (3) **Reporting** [WNCRAQA Code 17.0317(b) & 17.0508(f)]
The Permittee shall notify WNCRAQA at least five days prior to boiler tube cleaning solution evaporation.

(L) WNCRAQA CODE 4.2500 - MERCURY RULES FOR ELECTRIC GENERATORS - LOCAL-ENFORCEABLE ONLY

Note: Sections 4.2509 and .2511 are local-enforceable. All other sections of 4.2500 will not be enforced at this time.

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.2503(a) & 40 CFR 60.4106(f)]
Emissions of particulate matter from each utility boiler unit shall not exceed the following allocations:
- (a) Unit 1 Boiler - 2010 - 2017: 621 ounces
- 2018 and later: 250 ounces; and
 - (b) Unit 2 Boiler - 2010 - 2017: 575 ounces
- 2018 and later: 232 ounces.
- (2) **Monitoring/Recordkeeping/Reporting** [WNCRAQA Code 4.2503, .2505(a) and .2511]
- (a) The emissions of mercury of an Hg budget source shall not exceed the number of allowances that it has in its compliance account according to Rule .2510 of this Section.
 - (b) The emissions measurements recorded and reported according to 40 CFR 60.4170 through 60.4176 shall be used to determine compliance by each source identified in this rule with its emissions limitation according to 40 CFR 60.4106(c).
 - (c) The provisions of 40 CFR 60.4106(d) shall be used for excess emissions.
 - (d) The owner or operator of a Hg budget unit covered under this Section shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.4106(b) and (e) and in

40 CFR 60.4170 through 60.4176.

- (e) The Permittee shall comply with all applicable requirements of 15A NCAC 2D .2511 “Mercury Emission Limits.”

(M) WNCRAQA CODE 4.0530(u) - USE OF PROJECTED ACTUAL EMISSIONS TO AVOID APPLICABILITY OF PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS

- (1) **Use of Projected Actual Emissions** [WNCRAQA Code 4.0530(u)]
Pursuant to WNCRAQA Code 4.0530(u), the Permittee relied on the use of projected actual emissions to demonstrate that the replacement of the economizer inlet header, upper and lower tube bundles, and intermediate header at the reheat bypass wall in Unit 1 Boiler would not result in a significant emissions increase. In order to verify the assumptions used in the projected actual emissions calculations, the Permittee shall comply with the testing, recordkeeping, and reporting requirements in Sections 2.1(M)(2) through (4) below.
- (2) **Testing** [WNCRAQA Code 4.2601]
If emissions testing is required, the testing shall be performed in accordance General Condition JJ.
- (3) **Recordkeeping** [WNCRAQA Code 4.0530(u)]
The Permittee shall maintain records of actual emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide, volatile organic compounds, particulate matter (PM), particulate matter having a nominal aerodynamic diameter of 10 micrometers or less (PM₁₀), particulate matter having a nominal aerodynamic diameter of 2.5 micrometers or less (PM_{2.5}), sulfuric acid (H₂SO₄), and greenhouse gases (GHG) in tons per year on a calendar year basis for each of the five years following the resumption of regular operations after the replacements described in Section 2.1(M)(1) are made (but not including the initial shakedown period, not to exceed 180 days).
- (4) **Reporting** [WNCRAQA Code 4.0530(u)]
The results of any stack test required in Section 2.1(M)(2) above shall be reported within 30 days, and the test report shall be submitted within 60 days after the test. All instances of deviations from the requirements of this permit must be clearly identified. The Permittee shall submit a report of the emissions of all pollutants listed in Section 2.1(M)(3) to the Director within 60 days after the end of each calendar year during which the records in Section 2.1(M)(3) must be generated.

2.2 - Emission Source ID Unit 3 IC Turbine & Unit 4 IC Turbine

The following table provides a summary of limits and standards for the emission sources referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
Sulfur dioxide	40 tons SO ₂ per consecutive 12-month period; 0.05 percent by weight sulfur content of No. 2 fuel oil;	WNCRAQA Code 4.0530
	0.8 percent by weight sulfur content of all fuels	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart GG)
Particulate matter	25 tons PM per consecutive 12-month period; 15 tons PM ₁₀ per consecutive 12-month period;	WNCRAQA Code 4.0530

Regulated Pollutant	Limits / Standards	Applicable Regulation
Nitrogen oxides	0.0103 percent (103 ppm) by volume at 15 percent oxygen and on a dry basis for natural gas combustion; 0.0101 percent (101 ppm) by volume at 15 percent oxygen and on a dry basis for No. 2 fuel oil combustion	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart GG)
	13,725 tons NO _x per consecutive 12-month period	WNCRAQA Code 4.0530
	Clean Air Interstate Rule (CAIR) requirements (see Section 3)	WNCRAQA Code 4.2400
Visible emissions	20 percent opacity	WNCRAQA Code 4.0521

(A) **WNCRAQA CODE 4.0530 - PREVENTION OF SIGNIFICANT DETERIORATION (SULFUR DIOXIDE AND PARTICULATE MATTER REQUIREMENTS)**

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0530(g), 17.0317(a)(1), & 17.0508(b)]
In order to preclude applicability of WNCRAQA Code 4.0530(g) for major sources and major modifications, the following limitations shall apply:
 - (a) Both sources shall emit no more than 40 tons of sulfur dioxide (SO₂) per consecutive 12-month period;
 - (b) The No. 2 fuel oil combusted in both sources shall not exceed 0.05 percent by weight sulfur content; and
 - (c) Both sources shall emit no more than 25 tons of particulate matter (PM) per consecutive 12-month period.
 - (d) Both sources shall emit no more than 15 tons of particulate matter having a nominal aerodynamic diameter of 10 micrometers or less (PM₁₀) per consecutive 12-month period.
- (2) **Testing** [WNCRAQA Code 4.2600]
No testing is required at this time; however, WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2600 and General Condition JJ. If the results of this test are above the limit given in Section 2.2(A)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0530.
- (3) **Monitoring** [WNCRAQA Code 4.0605(b), 17.0317(b), & 17.0508(f)]
To assure compliance with the limitations given in Section 2.2(A)(1) above, the Permittee shall monitor the following:
 - (a) The hourly fuel-specific heat input measured in accordance with 40 CFR Part 75;
 - (b) The sulfur content of No. 2 fuel oil combusted in each combustion turbine as specified in §60.334(i) of 40 CFR Part 60, using the test methods and procedures in §60.335(b)(10) and (11);
 - (c) The calculated monthly SO₂, PM and PM₁₀ emissions based on the hourly fuel-specific heat input monitored per Section 2.2(A)(3)(a), the fuel sulfur content monitored per Section 2.2(A)(3)(b), and the PM and PM₁₀ emission factors established by the May 6-9, 2008 emissions testing; and

- (d) The annual SO₂, PM and PM₁₀ emissions for each consecutive 12-month period.
- (4) **Recordkeeping** [WNCRAQA Code 4.0605(b), 17.0317(b), & 17.0508(f)]
Records (written or electronic format) of the above monitoring shall be maintained onsite and made available to an authorized WNCRAQA representative upon request. The records shall include the following:
- (a) The date and time of the required monitoring; and
 - (b) The input parameters and results of the required monitoring noting whether or not noncompliant conditions were observed.
- (5) **Reporting** [WNCRAQA Code 17.0508(f)]
The Permittee shall submit a summary report of monitoring and recordkeeping activities, including the total SO₂, PM and PM₁₀ emissions for each month and each consecutive 12-month period in the reporting period, postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

(B) WNCRAQA CODE 4.0524 - NEW SOURCE PERFORMANCE STANDARDS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0524(a) & 17.0508(b)]
As specified in §60.332(a)(1) of 40 CFR Part 60, emissions of nitrogen oxides from each source shall not exceed 0.0103 percent (103 ppm) by volume at 15 percent oxygen and on a dry basis for natural gas combustion and 0.0101 percent (101 ppm) by volume at 15 percent oxygen and on a dry basis for No. 2 fuel oil combustion. As specified in §60.333(b), fuel combusted in each source shall not contain sulfur in excess of 0.8 percent by weight.
- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0524(a) and 17.0508(f)]
To assure compliance with the limitations given in Section 2.2(B)(1) above, the Permittee shall:
- (a) Monitor sulfur content of the No. 2 fuel oil being combusted in each combustion turbine according to §60.334(h) and using the test methods and procedures in §60.334(h)(1) and §60.335 (b)(10-11); and
 - (b) As required by §60.334(a), using the procedures in §60.335, for each combustion turbine, install and operate a continuous monitoring system to monitor and record fuel consumption and the ratio of water-to-fuel being combusted. The monitoring device shall be calibrated and maintained in accordance with the procedures in §60.334(g).
- (3) **Reporting** [WNCRAQA Code 4.0524(a) & 17.0508(f)]
The Permittee shall conduct reporting according to the following:
- (a) For the purpose of reports required under §60.7(c), periods of excess emissions for sulfur dioxide shall be reported for any daily period during which the sulfur content of the fuel being combusted exceeds 0.05 percent by weight based on a 12-month rolling average;
 - (b) For the purpose of reports required under §60.7(c), periods of excess emissions for nitrogen oxides shall be reported for any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with §60.332 by the performance test required in §60.8; and

- (c) The Permittee shall submit in writing the sulfur content and of the No. 2 fuel oil combusted in the combustion turbines by January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September.

All instances of deviations from the requirements of this permit must be clearly identified.

**(C) WNCRAQA CODE 4.0530 - PREVENTION OF SIGNIFICANT DETERIORATION
(NITROGEN OXIDES REQUIREMENTS)**

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0530(g), 17.0317(a)(1), & 17.0508(b)]
In order to preclude applicability of WNCRAQA Code 4.0530(g) for major sources and major modifications, both sources, in combination with Unit 1 Boiler and Unit 2 Boiler, shall emit no more than 13,725 tons of nitrogen oxides per consecutive 12-month period.
- (2) **Testing** [WNCRAQA Code 4.2612]
No testing is required at this time; however, WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2612 and General Condition JJ. If the results of this test are above the limit given in Section 2.2(C)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0530.
- (3) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0605(b), 17.0317(b), & 17.0508(f)]
To assure compliance with the limitation given in Section 2.2(C)(1) above, the Permittee shall determine nitrogen oxide emissions in pounds per hour using a CEMS meeting the requirements of 40 CFR Part 75, except that unbiased values may be used (missing data shall be filled in accordance with 40 CFR Part 75). Compliance with the nitrogen oxides emission limitation shall be determined monthly by summing hourly CEMS values over a consecutive 12-month period. The minimum number of data points, equally spaced, required to determine a valid hour value shall be determined by 40 CFR Part 75. If any consecutive 12-month sum exceeds the limitation given in Section 2.2(C)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0530.
- (4) **Reporting** [WNCRAQA Code 4.0605(b), 17.0317(b), & 17.0508(f)]
The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding three-month period between October and December, April 30 of each calendar year for the preceding three-month period between January and March, July 30 of each calendar year for the preceding three-month period between April and June, and October 30 of each calendar year for the preceding three-month period between July and September. All instances of deviations from the requirements of this permit must be clearly identified.

(D) WNCRAQA CODE 4.0521 - CONTROL OF VISIBLE EMISSIONS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0521(d) & 17.0508(b)]
Visible emissions from these sources shall not exceed 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.
- (2) **Testing** [WNCRAQA Code 4.2610]
If emissions testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2610 and General Condition JJ. If the results of this test are above the limit given in

Section 2.2(D)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0521.

(3) **Monitoring** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

To assure compliance with the limitation given in Section 2.2(D)(1) above, the Permittee shall perform a Method 9 test for 1 hour in accordance with WNCRAQA Code 4.2610 prior to exceeding 1,000 hours of operation while combusting No. 2 fuel oil in each of these sources. This monitoring protocol shall be repeated prior to each 1,000-hour period of operation while combusting No. 2 fuel oil. No monitoring is required while burning natural gas in these sources.

(4) **Recordkeeping** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

Records (written or electronic format) of the above monitoring shall be maintained onsite and made available to an authorized WNCRAQA representative upon request. The records shall include the following:

- (a) The date and time of each recorded action;
- (b) The results of each observation and/or test noting the source with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
- (c) The results of any corrective actions performed.

(5) **Reporting** [WNCRAQA Code 4.0605(b) & 17.0508(f)]

The permittee shall submit the results of the Method 9 test within 30 days of completion of the test. All instances of deviations from the requirements of this permit must be clearly identified.

2.3 - Emission Source ID Limestone Crusher, Limestone Conveyor 1, Limestone Conveyor 2, Limestone Conveyor 3, Limestone Bin 1, & Limestone Bin 2

The following table provides a summary of limits and standards for the emission sources referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
Particulate matter	0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot)	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart OOO)
	Local-enforceable only: As defined in specific conditions	WNCRAQA Code 4.0540
Visible emissions	7 percent opacity	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart OOO)

(A) WNCRAQA CODE 4.0524 - NEW SOURCE PERFORMANCE STANDARDS

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0524(a) & 17.0508(b)]

As specified in §60.672(a) of 40 CFR Part 60, emissions of particulate matter from these sources shall not exceed 0.05 grams per dry standard cubic meter (0.022 grains per dry standard cubic foot) and visible emissions from these sources shall not exceed 7 percent opacity when averaged over a six-minute period.

(2) **Testing** [WNCRAQA Code 4.0524(a)]

Within 60 days after achieving the maximum production rate at which these sources will be operated, but not later than 180 days after initial startup of these sources, an initial performance

test shall be conducted. Testing shall be performed in accordance with §60.675. If the results of this testing are above the limits given in Section 2.4(A)(1) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524.

(3) **Recordkeeping/Reporting** [WNCRAQA Code 4.0524(a) & 17.0508(f)]

The Permittee shall comply with the recordkeeping and reporting requirements of this standard as specified in §60.676(f), (h), and (i). All instances of deviations from the requirements of this permit must be clearly identified.

(B) WNCRAQA CODE 4.0540 - PARTICULATES FROM FUGITIVE NON-PROCESS DUST EMISSION SOURCES

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0540 & 17.0508(b)]

The Permittee shall not cause, allow, or permit particulate matter to become airborne in the ambient air as a result of storage, transportation, or handling of materials associated with non-process crushed stone operations without taking reasonable precautions for the prevention of such particulate matter from becoming airborne.

(2) **Monitoring/Recordkeeping/Reporting** [WNCRAQA Code 17.0508(f)]

No monitoring/recordkeeping/reporting is required for particulate matter emissions from fugitive sources.

2.4 - Emission Source ID Sorbent 1, Sorbent 2

The following table provides a summary of limits and standards for the emission sources referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
Particulate matter	$E = 4.10(P)^{0.67}$, where E = allowable emission rate in pounds per hour and P = process weight rate in tons per hour	WNCRAQA Code 4.0515
Visible emissions	20 percent opacity	WNCRAQA Code 4.0521

(A) WNCRAQA CODE 4.0515 - PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0515 & 17.0508(b)]

Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10(P)^{0.67} \quad \text{Where } E = \text{allowable emission rate in pounds per hour} \\ P = \text{process weight in tons per hour.}$$

(2) **Testing** [WNCRAQA Code 4.2609]

No testing is required at this time; however, the WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with the WNCRAQA Code 4.2609 and General Condition JJ. If the results of this test are above the limit given in Section 2.3(A)(1) above, the Permittee shall be deemed in noncompliance with the WNCRAQA Code 4.0515.

(3) **Monitoring/Recordkeeping** [WNCRAQA Code 17.0508(f)]

- (a) Particulate matter emissions from these sources shall be controlled by the dust collector. To ensure that optimum control efficiency is maintained, the Permittee shall perform inspections and maintenance as recommended by the manufacturer implemented in the plant's Work Management System. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement must include the following:

- (i) An annual internal inspection of the dust collector's structural integrity; and
- (ii) A monthly visual inspection of the system ductwork, and material collection unit for leaks.

The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0515 if the ductwork and dust collector are not inspected and maintained.

- (b) The results of inspection and maintenance shall be maintained in a log book (written or electronic form) on site and made available to an authorized representative upon request. The log book shall record the following:

- (i) The date and time of actions recorded;
- (ii) The results of each inspection;
- (iii) The results of any maintenance performed on the dust collector; and;
- (iv) Any variance from manufacturer's recommendations, and corrections made.

The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0515 if these records are not maintained.

(4) **Reporting** [WNCRAQA Code 17.0508(f)]

- (a) The Permittee shall submit the results of any maintenance performed on the dust collector within 30 days of a written request by the WNCRAQA.
- (b) The Permittee shall submit a summary report of monitoring and recordkeeping activities by January 30 and July 30 of each calendar year for the preceding six-month period. All instances of deviations from the requirements of this permit must be clearly identified.

(B) WNCRAQA CODE 4.0521 - CONTROL OF VISIBLE EMISSIONS

(1) **Emission Limitation/Standard** [WNCRAQA Code 4.0521 & 17.0508(b)]

Visible emissions from these sources 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.

(2) **Testing** [WNCRAQA Code 4.2610]

No testing is required at this time; however, the WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with the WNCRAQA Code 4.2610 and General Condition JJ. If the results of this test are above the limit given in Section 2.4(A)(1) above, the Permittee shall be deemed in noncompliance with the WNCRAQA Code 4.0521.

(3) **Monitoring** [WNCRAQA Code 17.0508(f)]

To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The Permittee shall establish "normal" for the source in the first 30 days following start-up of the sources. If visible emissions from this source are observed to be above normal, the Permittee shall either: (a) immediately shutdown the source and repair the malfunction, (b) be deemed to be in noncompliance with WNCRAQA Code 4.0521 or (c) demonstrate that the percent opacity from the emission points of the emission sources in accordance with WNCRAQA Code 4.2601 for 30 minutes is below the limit given in Section 2.1 2.4(B)(1) above. If the demonstration in (c) above cannot be made, the Permittee shall be deemed to be in noncompliance with WNCRAQA Code 4.0521.

(4) **Recordkeeping** [WNCRAQA Code 17.0508(f)]

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:

- (a) The date and time of each recorded action;
- (b) The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
- (c) The results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0521 if these records are not maintained.

(5) **Reporting** [WNCRAQA Code 17.0508(f)]

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. All instances of deviations from the requirements of this permit must be clearly identified.

2.5 - Emission Source ID Emergency Generator 1, Fire Pump Engine 1

(A) **WNCRAQA CODE 4.1111 - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT - 40 CFR PART 63 SUBPART ZZZZ)**

(1) **Compliance Date** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63. 6595(a)(1)]

These sources must be in compliance with all applicable requirements of 40 CFR Part Subpart ZZZZ - Reciprocating Internal Combustion Engines (RICE) by May 3, 2013.

(2) **Emission and Operating Limitations** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63. 6602]

The Permittee must perform the following work practice requirements:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the above schedule, or if performing the work practice on the above schedule would otherwise pose an unacceptable risk under Federal,

State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement. Sources can petition the EPA Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

- (3) **General Requirements** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63. 6625(e)]
- (a) The Permittee must be in compliance with the applicable emission limitations and operating limitations at all times. (Note: These sources do not have emissions limitation.)
 - (b) At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved.
- (4) **Monitoring, Installation, Collection, Operation, and Maintenance Requirements** [WNCRAQA Code 4.1111 & 17.0508(f) & 40 CFR 63. 6625]
- (a) Per §63.6625(e), the Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions, or the Permittee shall develop its own maintenance plan, which must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 - (b) Per §63.6625(f), the Permittee must install a non-resettable hour meter if one is not already installed.
 - (c) Per §63.6625(h), the Permittee shall minimize the engine's time spent at idle during startup time and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time, the non-startup emission limitations (if any) apply.
- (5) **Demonstrating Compliance with Emission and Operating Limitations** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63. 6640]
- (a) Per §63.6640(a), the Permittee must demonstrate continuous compliance with each emission limitation and operating limitation according to Condition 2.4(4)(a), above.
 - (b) Per §63.6640(b) the Permittee must report each instance in which each applicable emission limitation or operating limitation was not met. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in § 63.6650.
 - (c) Per §63.6640(e) the Permittee must also report each instance in which the applicable requirements in the General Provisions, as indicated in §63.6665 and shown in Table 8 to this subpart, were not met.
 - (d) Per §63.6640(f) the Permittee must operate the engine according to the conditions described below:
 - (i) Any operation other than emergency operation, maintenance and testing, and operation in nonemergency situations for 50 hours per year, as permitted in this section, is prohibited;
 - (ii) There is no time limit on the use of emergency stationary RICE in emergency situations.

- (iii) The emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the EPA Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
 - (iv) The emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for nonemergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.
- (6) **Recordkeeping** [WNCRAQA Code 4.1111 & 17.0508(f) & 40 CFR 63. 6655 & .6660]
- (a) The Permittee shall keep records that show that management practices that are required are being met. These records must include, at a minimum:
 - (i) Oil and filter change dates and corresponding hour on the hour meter;
 - (ii) Inspection and replacement dates for air cleaners, hoses, and belts; and
 - (iii) Records of other emission-related repairs and maintenance performed.
 - (b) Each record must be kept readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

SECTION 3 - CLEAN AIR INTERSTATE RULE (CAIR) PERMIT REQUIREMENTS

(A) WNCRAQA CODE 4. 2403: NITROGEN OXIDE EMISSIONS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.2403]
The total nitrogen oxide (NO_x) emissions from Duke Energy Progress, Inc.'s Asheville Steam Electric Plant shall not exceed, except as provided in WNCRAQA Code 4.2408:
 - (a) 1,789 tons annually for 2015 and later.

- (2) **Trading** [WNCRAQA Code 4.2408]
The affected CAIR NO_x sources shall comply with the requirements of WNCRAQA Code 4.2400 using the trading program and banking set out in 40 CFR Part 96.
- (3) **Liability** [WNCRAQA Code 4.2403(e)]
The owner or operator of any unit or source covered under WNCRAQA Code 4.2403 shall be subject to the provisions of 40 CFR 96.106(f).
- (4) **Monitoring/Recordkeeping/Reporting** [WNCRAQA Code 4.2403 & 4.2407(a)(1)]
The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 96.106(b) and (e), and 40 CFR 96 Subpart HH for each CAIR NO_x unit. The emissions of nitrogen oxides of a CAIR NO_x source shall not exceed the number of allowances that it has in its compliance account established and administered under WNCRAQA Code 4.2408. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HH shall be used to determine compliance by each CAIR NO_x source with its emissions limitation according to 40 CFR 96.106(c) including 96.106(c)(5) and (6). The provisions of 40 CFR 96.106(d) shall be used for excess emissions.

(B) WNCRAQA CODE 4.2405 - NITROGEN OXIDE EMISSIONS DURING OZONE SEASON

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.2405(a)(1) & (b)]
Ozone season NO_x emissions from Duke Energy Progress, Inc.'s Asheville Steam Electric Plant shall not exceed, except as provided in WNCRAQA Code 4.2408:
 - (a) 765 tons during the ozone season for 2015 and later.

The ozone season shall be defined as the period of time extending from May 1 to September 30 of each calendar year.
- (2) **Trading** [WNCRAQA Code 4.2408]
The affected CAIR NO_x Ozone Season sources shall comply with the requirements of WNCRAQA Code 4.2400 using the trading program and banking set out in 40 CFR Part 96.
- (3) **Liability** [WNCRAQA Code 4.2405(g)]
The owner or operator of any unit or source covered under WNCRAQA Code 4.2405 shall be subject to the provisions of 40 CFR 96.306(f).
- (4) **Monitoring/Recordkeeping/Reporting** [WNCRAQA Code 4.2405 & 4.2407(a)(3)]
The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 96.306(b) and (e), and 40 CFR 96 Subpart HHHH for each CAIR Ozone Season NO_x unit. The nitrogen oxide ozone season emissions of a CAIR NO_x Ozone Season source shall not exceed the number of allowances that it has in its compliance account established and administered under WNCRAQA Code 4.2408. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHHH shall be used to determine compliance by each CAIR NO_x Ozone Season source with its emissions limitation according to 40 CFR 96.306(c) including 96.306(c)(5) and (6). The provisions of 40 CFR 96.306(d) shall be used for excess emissions.

(C) WNCRAQA CODE 4.2404 - SULFUR DIOXIDE EMISSIONS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.2404(b)]
The annual allocation of sulfur dioxide allowances shall be determined by EPA. The allocations for CAIR SO₂ units are listed in the table below (these allocations are from 40 CFR 73.10):
 - (a) Unit 1 - 6,633 for 2010 and later; and
 - (b) Unit 2 - 5,271 for 2010 and later.

- (2) **Trading** [WNCRAQA Code 4.2408]
The affected CAIR SO₂ sources shall comply with the requirements of WNCRAQA Code 4.2400 using the trading program and banking set out in 40 CFR Part 96.
- (3) **Liability** [WNCRAQA Code 4.2404(f)]
The owner or operator of any unit or source covered under 15A NCAC 2D .2404 shall be subject to the provisions of 40 CFR 96.206(f).
- (4) **Monitoring/Recordkeeping/Reporting** [WNCRAQA Code 4.2404 & 4.2407(a)(2)]
The Permittee shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 96.206(b) and (e), and 40 CFR 96 Subpart HHH for each CAIR SO₂ unit. The emissions of sulfur dioxides of a source described in Section 3(C)(1) above shall not exceed the number of allowances that it has in its compliance account established and administered under WNCRAQA Code 4.2408. The emissions measurements recorded and reported according to 40 CFR Part 96 Subpart HHH shall be used to determine compliance by each CAIR SO₂ source with its emissions limitation according to 40 CFR 96.206(c) including 96.206(c)(5) and (6). The provisions of 40 CFR 96.206(d) shall be used for excess emissions.

(D) CAIR PERMIT APPLICATION

The permit application submitted for this facility, as approved by WNCRAQA, is part of this permit. The owner and operator of these CAIR NO_x and SO₂ sources must comply with the standard requirements and special provisions set forth in the following attached application:

CAIR Permit Application dated June 23, 2014.

SECTION 4 - ACID RAIN PROGRAM REQUIREMENTS

ORIS code: 2706
Effective: January 1, 2015 through December 31, 2019

(A) Statement of Basis

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, WNCRAQA issues this permit pursuant to WNCRAQA Code 17.0400 and 17.0500, and other applicable laws.

(B) SO₂ Allowance Allocations and NO_x Reduction Requirements for Each Affected Unit

The following table provides a summary of the Title IV applicable requirements for the emission source(s) at this facility:

Emission Source ID	Reduction Requirement	2015	2016	2017	2018	2019
Unit 1 Boiler	SO ₂ Allowances under Table 2, 3, or 4 of 40 CFR Part 73	6,633*	6,633*	6,633*	6,633*	6,633*
Unit 1 Boiler	NO _x Limit	WNCRAQA approves a standard NO _x compliance plan for this unit. The compliance plan is effective for calendar year 2015 through calendar year 2019. Under the compliance plan, this unit's annual average NO _x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable				

Emission Source ID	Reduction Requirement	2015	2016	2017	2018	2019
		<p>emission limitation, under 40 CFR 76.7(a)(2) of 0.46 lb/MMBtu for dry bottom wall-fired boilers.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				
Unit 2 Boiler	SO ₂ Allowances under Table 2, 3, or 4 of 40 CFR Part 73	5,271*	5,271*	5,271*	5,271*	5,271*
Unit 2 Boiler	NO _x Limit	<p>WNCRAQA approves a standard NO_x compliance plan for this unit. The compliance plan is effective for calendar year 2015 through calendar year 2019. Under the compliance plan, this unit's annual average NO_x emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(2) of 0.46 lb/MMBtu for dry bottom wall-fired boilers.</p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				
Unit 3 IC Turbine and Unit 4 IC Turbine	SO ₂ Allowances under Table 2, 3, or 4 of 40 CFR Part 73	NA**	NA**	NA**	NA**	NA**
	NO _x Limit	NA***				

*The number of allowances allocated to Phase II-affected units by U.S. EPA may change under a future revision to 40 CFR Part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

**SO₂ allowances are not allocated by U.S. EPA for new units under 40 CFR Part 72.

***Does not apply for gas or oil-fired units.

(C) Comments, Notes, and Justifications

None.

(D) Permit Applications (Attached)

The permit applications submitted for this facility, as approved by WNCRAQA, are 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 following attached applications:

Acid Rain Permit Application dated June 23, 2014; and
Acid Rain NO_x Compliance Plan dated March 23, 2015.

SECTION 5 - GENERAL CONDITIONS AND LIMITATIONS

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

(A) **General Provisions** [NCGS 143-215 and WNCRAQA Code 17.0508(i)(16)]

- (1) Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in WNCRAQA Code Chapters 4 and 17.
- (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 WNCRAQA.
- (3) This permit is not a waiver of or approval of any other 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 local laws or rules, unless specifically authorized by an order from WNCRAQA.
- (5) Except as identified as local-only requirements in this permit, all terms and conditions contained herein shall be enforceable by WNCRAQA, 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 WNCRAQA, unless the source is exempted by rule. WNCRAQA 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** [WNCRAQA Code 17.0507(k) and 17.0508 (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 WNCRAQA upon request.

(C) **Severability Clause** [WNCRAQA Code 17.0508(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** [WNCRAQA Code 17.0507(e) and 17.0508(i)(16)]

Except as otherwise specified herein, one copy of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to WNCRAQA.

(E) **Duty to Comply** [WNCRAQA Code 17.0508(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 local-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** - LOCAL 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 [WNCRAQA Code 17.0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with WNCRAQA Code 17.0514.
- (2) Transfer of Ownership or Operation [WNCRAQA Code 17.0524 and 17.0505]
The Permittee shall submit an application for an ownership change in accordance with WNCRAQA Code 17.0524 and 17.0505.
- (3) Minor Permit Modifications [WNCRAQA Code 17.0515]
The Permittee shall submit an application for a minor permit modification in accordance with WNCRAQA Code 17.0515.
- (4) Significant Permit Modifications [WNCRAQA Code 17.0516]
The Permittee shall submit an application for a significant permit modification in accordance with WNCRAQA Code 17.0516.
- (5) Reopening for Cause [WNCRAQA Code 17.0517]
The Permittee shall submit an application for reopening for cause in accordance with WNCRAQA Code 17.0517.

(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 WNCRAQA:
 - (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 WNCRAQA 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 [WNCRAQA Code 17.0523(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 the permit is revised or renewed, whichever comes first.
- (3) Off Permit Changes [WNCRAQA Code 17.0523(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 [WNCRAQA Code 17.0523(c)]

To the extent that emissions trading is allowed under WNCRAQA Code Chapter 4, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to WNCRAQA Code 17.0523(c).

(I.A) Reporting Requirements for Excess Emissions and Permit Deviations [WNCRAQA Code 4.0535(f) and 17.0508(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 Chapter 4; or by a permit condition; or that exceeds an emission limit established in a permit issued under WNCRAQA Code 17.0700. (*Note: Definitions of excess emissions under 4.1110 and 4.1111 shall apply where defined by rule.*)

“Deviations” - for the purpose 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 (WNCRAQA Code 4.0524), NESHAPs (WNCRAQA Code 4.1110 or 4.1111), 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 (WNCRAQA Code 4.0524), NESHAPs (WNCRAQA Code 4.1110 or 4.1111), or these rules do NOT define “excess emissions,” the Permittee shall report excess emissions in accordance with WNCRAQA Code 4.0535 as follows:
 - (a) Pursuant to WNCRAQA Code 4.0535, 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 Director of any such occurrence by 9:00 a.m. Eastern Time of the Agency'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 Director immediately when corrective measures have been accomplished; and
- (iii) Submit to the Director within 15 days a written report as described in WNCRAQA Code 4.0535(f)(3);

Permit Deviations

- (3) Pursuant to WNCRAQA Code 17.0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - (a) Notify the Director of all other deviations from permit requirements not covered under WNCRAQA Code 4.0535 quarterly. A written report to the Director 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 WNCRAQA Code 4.0535

The Permittee shall comply with all other applicable requirements contained in WNCRAQA Code 4.0535, including 4.0535(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 WNCRAQA Code 4.0535(c)(1) through (7).
- (2) WNCRAQA Code 4.0535(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 WNCRAQA 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** [WNCRAQA Code 17.0508(e) and 17.0513(b)]

This 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 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with WNCRAQA Code 17.0512(b)(1), this WNCRAQA Code 17.0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under WNCRAQA Code 17.0400 terminates the facility's right to operate unless a complete WNCRAQA Code 17.0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 2Q .0400 requirements. In either of these events, all terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

(L) **Need to Halt or Reduce Activity Not a Defense** [WNCRAQA Code 17.0508(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)** [WNCRAQA Code 17.0508(i)(9)]

- (1) The Permittee shall furnish to WNCRAQA, 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 WNCRAQA 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** [WNCRAQA Code 17.0507(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 WNCRAQA. 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** [WNCRAQA Code 17.0508(f) and 17.0508(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 an authorized WNCRAQA representative for inspection upon request.

(P) **Compliance Certification** [WNCRAQA Code 17.0508(n)]

The Permittee shall submit to WNCRAQA and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before **January 30** 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** [WNCRAQA Code 17.0520]

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** [WNCRAQA Code 17.0512]

- (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 Director under WNCRAQA Code 1.0102(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 WNCRAQA Code 17.0523.

- (4) A permit shield does not extend to minor permit modifications made under WNCRAQA Code 17.0515.

(S) **Termination, Modification, and Revocation of the Permit** [WNCRAQA Code 17.0519]

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** [WNCRAQA Code 17.0503]

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 WNCRAQA representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

(U) **Property Rights** [WNCRAQA Code 17.0508(i)(8)]

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

(V) **Inspection and Entry** [WNCRAQA Code 17.0508(l) and 1.0104(d)]

- (1) Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow WNCRAQA, 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 WNCRAQA 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 or her official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

(W) **Annual Fee Payment** [WNCRAQA Code 17.0508(i)(10)]

- (1) The Permittee shall pay all fees in accordance with WNCRAQA Code 17.0200.
- (2) Payment of fees may be by check or money order made payable to the Western North Carolina Regional Air Quality Agency. 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 WNCRAQA Code 17.0519.

(X) **Annual Emission Inventory Requirements** [WNCRAQA Code 17.0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in WNCRAQA Code 17.0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such forms 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** [WNCRAQA Code 17.0107 and 17.0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to WNCRAQA Code 17.0107, 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 WNCRAQA Code 17.0107.

(Z) **Construction and Operation Permits** [WNCRAQA Code 17.0100 and 17.0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source that is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of WNCRAQA Code 17.0100 and 17.0300.

(AA) **Standard Application Form and Required Information** [WNCRAQA Code 17.0505 and 17.0507]

The Permittee shall submit applications and required information in accordance with the provisions of WNCRAQA Code 17.0505 and 17.0507.

(BB) **Financial Responsibility and Compliance History** [WNCRAQA Code 17.0507(d)(4)]

WNCRAQA 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)** [WNCRAQA Code 17.0501(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)** [WNCRAQA Code 17.0508(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** [WNCRAQA Code 17.0508(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** [WNCRAQA Code 4.0300]

Should the Director 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 WNCRAQA Code 4.0300.

(HH) **Registration of Air Pollution Sources** [WNCRAQA Code 4.0202]

The Director 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 WNCRAQA Code 4.0202(b).

(II) **Ambient Air Quality Standards** [WNCRAQA Code 4.0501(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 WNCRAQA Code 4.0400 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** [WNCRAQA Code 17.0508(i)(16)]

Emission compliance testing shall be by the procedures of WNCRAQA Code 4.2600, except as may be otherwise required in WNCRAQA Code 4.0524, 4.0912, 4.1110, 4.1111, or 4.1415. If emissions testing is required by this permit or WNCRAQA or if the Permittee submits emissions testing to WNCRAQA to demonstrate compliance, the Permittee shall perform such testing in accordance with WNCRAQA Code 4.2600 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) One copy 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 WNCRAQA 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 WNCRAQA using the appropriate testing procedures described in WNCRAQA Code 4.2600 has precedence over all other tests.

(KK) Reopening for Cause [WNCRAQA Code 17.0517]

- (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 WNCRAQA Code 17.0513(c).
- (3) Except for the local enforceable only portion of the permit, the procedures set out in WNCRAQA Code 17.0507, 17.0521, or 17.0522 shall be followed to reissue the permit. If the local

enforceable only portion of the permit is reopened, the procedures in WNCRAQA Code 17.0300 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** [WNCRAQA Code 17.0508(i)(16)]
The Permittee shall maintain a record of operation for permitted equipment, noting whenever the equipment is taken from and placed into operation. During operation, the monitoring, recordkeeping, and reporting requirements, as prescribed by the permit, shall be implemented within the monitoring period.
- (MM) **Fugitive Dust Control Requirement** [WNCRAQA Code 4.0540] - LOCAL ENFORCEABLE ONLY
As required by WNCRAQA Code 4.0540 "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 WNCRAQA Code 4.0540(g). "Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).
- (NN) **Specific Permit Modifications** [WNCRAQA Code 17.0501 and 17.0523]
- (1) For modifications made pursuant to WNCRAQA Code 17.0501(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 WNCRAQA Code 17.0501(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 WNCRAQA Code 17.0500 (except for WNCRAQA Code 17.0504) is obtained.
 - (3) For modifications made pursuant to 502(b)(10), in accordance with WNCRAQA Code 17.0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA Region 4 - Air Planning Branch, 61 Forsyth St., 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** [WNCRAQA Code 17.0521, 17.0522 and 17.0525(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 2Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Insignificant Activities Under WNCRAQA Code 17.0503(8)

Emission Source Description	Control Device Description
Two (2) 1,804,000-gallon capacity aboveground No. 2 fuel oil storage tanks	NA
Two (2) 15,000-gallon capacity urea storage tanks	NA
One (1) 90,000-gallon capacity urea solution feed tank	NA
One (1) 4.00 million BTU per hour natural gas-fired gas heater	NA
One (1) 200-gallon capacity No. 2 fuel oil storage tank	NA
One (1) 280-gallon capacity No. 2 fuel oil storage tank	NA
One (1) 25,000-gallon capacity No. 2 fuel oil storage tank	NA
Two (2) 6,200-gallon capacity lube oil tanks	NA
Two (2) 250-gallon capacity false start drain tanks	NA
One (1) 1,000-gallon capacity kerosene storage tank	NA
One (1) 1,000-gallon capacity gasoline storage tank	NA
One (1) 8,000-gallon capacity batch lube oil tank	NA
One (1) 9,200-gallon capacity batch lube oil tank	NA
One (1) 4,455-gallon capacity turbine lube oil tank with demister	NA
One (1) 3,000-gallon capacity turbine lube oil tank with demister	NA
One (1) 8,000-gallon capacity transformer oil tank	NA
One (1) 500-gallon capacity mobile diesel fuel storage tank	NA
Coal handling / coal pile / ash handling and ash pond	NA
One (1) 5,000-gallon sulfuric acid tank	NA
Gypsum handling system	NA
Limestone pile	NA

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
BTU	British Thermal Unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CI	Compression Ignition
COMS	Continuous Opacity Monitoring System
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NCGS	North Carolina General Statutes
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
PM_{2.5}	Particulate Matter with Nominal Aerodynamic Diameter of 2.5 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RICE	Reciprocating Internal Combustion Engine
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TPY	Tons Per Year
VOC	Volatile Organic Compound
WNCRAQA	Western North Carolina Regional Air Quality Agency