

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, LLC**
Asheville Combined Cycle Plant

Facility ID: 11-628
Facility Site Location: 46 Duke Energy Lane
City, State, Zip: Arden, North Carolina 28704

Facility Mailing Address: 46 Duke Energy Lane
City, State, Zip: Arden, North Carolina 28704

Permit Number: 11-628-21
Replaces Permit Number: 11-628-16B
Issue Date: January 11, 2022
Effective Date: February 1, 2022
Renewal Application Due Date: July 31, 2027
Expiration Date: January 31, 2027

Ashley J. Featherstone
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 5 and Unit 7	Two (2) natural gas/No. 2 fuel oil fired simple/combined cycle internal combustion turbines with a nominal rated capacity of 2,207 MMBtu per hour each, equipped with two steam turbines (Units 6 and 8). (Includes bypass stacks for simple cycle mode.)	SCR5 and SCR7* OxdnCat5 and OxdnCat7	Selective Catalytic Reduction System (applicable for combined-cycle mode of operation only) Oxidation catalyst (applicable for combined-cycle mode of operation only)
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
AuxBoiler	One (1) 47.6 MMBtu per hour natural gas-fired auxiliary boiler	NA	
DPH1A and DPH1B	Two (2) 8.8 MMBtu/hr natural gas-fired dew point heaters	NA	
Emergency Generator 2 & 3	Two (2) diesel-fired emergency use black start engines with rated output capacities of 1,400 horsepower each	NA	
Fire Pump Engine 2*	One (1) diesel-fired emergency use fire pump engine with a rated output capacity of 335 horsepower	NA	
CTWR1 & CTWR2	Two (2) cooling towers	NA	
Emergency Generator 4*	One (1) diesel-fired emergency use fire pump engine with a rated output capacity of 762 horsepower for the water treatment system	NA	

Emission Source ID	Emission Source Description	Control Device ID	Control Device Description
Emergency Generator 5*	One (1) diesel-fired emergency use fire pump engine with a rated output capacity of 142 horsepower for the landfill leachate system	NA	
Heat 1**	One (1) 4.0 MMBtu/hr natural gas-fired heater	NA	

*Because this source is subject to a MACT standard, it is being listed as a permitted source rather than as an insignificant activity, so that the relevant requirements can be listed in the permit.

** This source is included as permitted equipment because they were included in a facility wide NC Air toxics analysis.

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 5 & Unit 7

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
	0.06 lb/million Btu heat input	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart KKKK)
	Phase II Acid Rain program requirements (see Section 3)	WNCRAQA Code 17.0402
Particulate matter	See Section 2.6	WNCRAQA Code 4.0530 Actuals PAL
Nitrogen oxides	15 ppm while burning natural gas when operating at 75 percent of peak load or greater	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart KKKK)
	96 ppm while burning natural gas when operating at 75 percent of peak load or greater when operating at less than 75 percent load or operating at less than 0°F	
	42 ppm while burning No. 2 fuel oil when operating at 75 percent of peak load or greater	
	96 ppm while burning No. 2 fuel oil when operating at 75 percent of peak load or greater when operating at less than 75 percent load or operating at less than 0°F	
	13,725 tons NO _x per consecutive 12-month period	WNCRAQA Code 4.0530

Regulated Pollutant	Limits / Standards	Applicable Regulation
	Phase II Acid Rain program requirements (see Section 3)	WNCRAQA Code 17.0402
	Cross State Air Pollution Rule (CSAPR) requirements (see Section 2.1.F)	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:

Regulated Pollutant	Limits / Standards (tons per year)	Control Technology
Nitrogen oxides	1,029.55	selective catalytic reduction (applicable for combined-cycle mode of operation only)
Sulfur dioxide	2,074.71	sulfur content of natural gas shall not exceed 1.7 grains per 100 standard cubic feet
Particulate Matter (filterable)	56.36	none
PM-10 & PM-2.5	201.25	none
Carbon monoxide	259.64	oxidation catalyst (applicable for combined-cycle mode of operation only)
VOCs	53.13	oxidation catalyst (applicable for combined-cycle mode of operation only)
Sulfuric acid	19.40	sulfur content of natural gas shall not exceed 1.7 grains per 100 standard cubic feet
Lead	0.61	none

- (2) **Testing** [WNCRAQA Code 4.2600]
The Permittee has completed initial testing for these sources (Unit 5 and 7). If additional 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)]
The Permittee shall keep records of the monthly emissions from each source (ID Nos. Unit 5 Turbine and Unit 7 Turbine), in a logbook (written or in electronic format). The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0530(g) if these records are not kept or if any of the above limits are exceeded. Emissions shall be determined as follows:

$$\text{Total Emissions} = \sum \text{Unit 5} + \text{Unit 7}$$

- (a) Nitrogen Oxides

Emissions of nitrogen oxides shall be determined using a continuous emissions monitoring (CEM) system meeting the requirements of WNCRAQA Code 4.0613 - 40 CFR Part 60 Appendix B "Performance Specifications" and Appendix F "Quality Assurance Procedures." If the owner or operator has installed a nitrogen oxides CEMS to meet the requirements of 40 CFR Part 75 and is continuing to meet the ongoing requirements of 40 CFR Part 75, that CEMS may be used to meet the requirements of this section, and used to calculate total nitrogen oxide emissions in accordance with the following equation. Data reported to meet the requirements of this section shall include data substituted using the missing data procedures in subpart D of 40 CFR Part 75 and may be bias adjusted according to the procedures of 40 CFR Part 75.

Total Monthly Emissions (NO_x) =

Unit 5 CEMS + Unit 7 CEMS

(b) Sulfur Dioxide

Emissions of sulfur dioxide for Unit 5 and Unit 5 shall be determined using the following equation:

Total Monthly Emissions (SO₂) =

$$\begin{aligned} & (0.000724 \text{ lb/mmBtu}) * (\text{mmBtu SC oil, Unit 5} + \text{mmBtu SC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (0.000923 \text{ lb/mmBtu}) * (\text{mmBtu SC gas, Unit 5} + \text{mmBtu SC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (0.000724 \text{ lb/mmBtu}) * (\text{mmBtu CC oil, Unit 5} + \text{mmBtu CC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (0.000923 \text{ lb/mmBtu}) * (\text{mmBtu CC gas, Unit 5} + \text{mmBtu CC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) \end{aligned}$$

(c) Particulate Matter (filterable)

In order to demonstrate compliance with the PM emission limit of 56.36 tons per 12-month rolling average, the Permittee shall monitor the operating hours on fuel oil and natural gas and calculate the monthly PM emissions from each source as follows:

Total Monthly Emissions (PM) =

$$\begin{aligned} & (14.2 \text{ lb/hr}) * ((\text{hours}/\text{month SC oil, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (2.50 \text{ lb/hr}) * ((\text{hours}/\text{month SC gas, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (14.2 \text{ lb/hr}) * ((\text{hours}/\text{month CC oil, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (2.50 \text{ lb/hr}) * ((\text{hours}/\text{month CC gas, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (14.2 \text{ lb/hr}) * ((\text{hours}/\text{month SC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (2.50 \text{ lb/hr}) * ((\text{hours}/\text{month SC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (14.2 \text{ lb/hr}) * ((\text{hours}/\text{month CC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (2.50 \text{ lb/hr}) * ((\text{hours}/\text{month CC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) \end{aligned}$$

(d) PM-10 and PM-2.5

In order to demonstrate compliance with the PM-10 and PM-2.5 emissions limits of 201.25 tons per 12-month rolling average, the Permittee shall monitor the operating hours on fuel oil and natural gas and calculate the monthly PM emissions from each source as follows:

$$\begin{aligned} \text{Total Monthly Emissions (PM)} = & \\ & (39.7 \text{ lb/hr}) * ((\text{hours/month SC oil, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (8.70 \text{ lb/hr}) * ((\text{hours/month SC gas, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (39.7 \text{ lb/hr}) * ((\text{hours/month CC oil, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (8.70 \text{ lb/hr}) * ((\text{hours/month CC gas, Unit 5}) * (\text{ton}/2000 \text{ lb}) + \\ & (39.7 \text{ lb/hr}) * ((\text{hours/month SC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (8.70 \text{ lb/hr}) * ((\text{hours/month SC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (39.7 \text{ lb/hr}) * ((\text{hours/month CC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (8.70 \text{ lb/hr}) * ((\text{hours/month CC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) \end{aligned}$$

(e) Carbon Monoxide

Emissions of carbon monoxide shall be determined for Combustion Turbines Unit 5 and Unit 7 using a CEM system that meets the requirements of WNCRAQA Code 4.0613 except that:

- (i) A Cylinder Gas Audit (CGA) shall be conducted at least once each QA operating quarter on each simple cycle stack CO CEMS and each combined-cycle stack CO CEMS in accordance with 40 CFR Part 75, Appendix B, §2.2.1 instead of once every calendar quarter. A QA operating quarter for each CO CEMS is defined as a calendar quarter in which the unit operates at least 168 unit operating hours (in simple-cycle or combined-cycle mode), and a unit operating hour is a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour. Regardless of the number of hours of operation, at a minimum, a CGA shall be conducted at least once every four calendar quarters on each CO CEMS consistent with the requirements in 40 CFR Part 75, Appendix B, §2.2.3(f).
- (ii) A Relative Accuracy Test Audit (RATA) shall be conducted once every four successive QA operating quarters (as defined above) in accordance with 40 CFR Part 75, Appendix B, §2.3.1.2 instead of once every four calendar quarters. Regardless of the number of hours of operation, at a minimum, a RATA shall be conducted at least once every eight calendar quarters on each CO CEMS consistent with the requirements in 40 CFR Part 75, Appendix B, §2.3.1.1(a).
- (iii) All grace period provisions from Part 75, Appendix B, §2.2.4 and, §2.3.3 apply.

In order to demonstrate compliance with the carbon monoxide emissions limit of 259.64 tons per 12-month rolling average, the Permittee shall monitor the monthly carbon monoxide emissions from each source as follows:

$$\text{Total Monthly Emissions (CO)} =$$

$$\text{Unit 5 CEMS} + \text{Unit 7 CEMS}$$

(f) VOCs

In order to demonstrate compliance with the VOC emissions limit of 53.13 tons per 12-month rolling average, the Permittee shall monitor the operating hours on natural gas and fuel oil in simple cycle and combined cycle modes for Combustion Turbines Unit 5 and Unit 7 and calculate the monthly carbon monoxide emissions from each source as follows:

Total Monthly Emissions (VOC) =

$$\begin{aligned} & (0.00403 \text{ lb/mmBtu}) * (\text{mmBtu SC oil, Unit 5} + \text{mmBtu SC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (0.00170 \text{ lb/mmBtu}) * (\text{mmBtu SC gas, Unit 5} + \text{mmBtu SC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (0.00203 \text{ lb/mmBtu}) * (\text{mmBtu CC oil, Unit 5} + \text{mmBtu CC oil, Unit 7}) * (\text{ton}/2000 \text{ lb}) + \\ & (0.00128 \text{ lb/mmBtu}) * (\text{mmBtu CC gas, Unit 5} + \text{mmBtu CC gas, Unit 7}) * (\text{ton}/2000 \text{ lb}) \end{aligned}$$

- (g) Sulfuric acid and Lead
No monitoring is required for sulfuric acid and lead.

- (4) **Reporting** [WNCRAQA Code 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 Permittee shall submit an annual summary report, acceptable to the Director, of emissions of the above pollutants from each source (ID Nos. Unit 5 Turbine and Unit 7 Turbine) and the total for all sources based on the calculations above (tons per rolling consecutive 12-month period) postmarked on or before January 30 of each calendar year for the preceding 12-month period between January and December. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

(B) WNCRAQA CODE 4.0524 - NEW SOURCE PERFORMANCE STANDARDS

The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards" as promulgated in 40 CFR Part 60 Subpart KKKK, including Subpart A "General Provisions."

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0524(a) & 17.0508(b)]
NO_x emissions (except during startup, shutdowns, and malfunction) from Unit 5 and Unit 7 while burning natural gas shall not exceed:
- (a) 15 ppm at 15 percent O₂, or
- (b) 96 ppm at 15 percent O₂ when operating at less than 75 percent of peak load or operating at ambient temperature below 0° F.
- (2) **Emission Limitation/Standard** [WNCRAQA Code 4.0524(a) & 17.0508(b)]
NO_x emissions (except during startup, shutdowns, and malfunction) from Unit 5 and Unit 7 while burning No. 2 fuel oil shall not exceed:
- (a) 42 ppm at 15 percent O₂, or
- (b) 96 ppm at 15 percent O₂ when operating at less than 75 percent of peak load or operating at ambient temperature below 0° F.
- (3) **Emission Limitation/Standard** [WNCRAQA Code 4.0524(a) & 17.0508(b)]
SO₂ emissions (except during startup, shutdowns, and malfunction) from Unit 5 and Unit 7 shall not exceed:
- (a) 0.06 lb/million Btu heat input (fuel sulfur content limit) [§60.4330]

- (4) **Testing** [WNCRAQA Code 4.2600]
The Permittee has completed initial testing for these sources (Unit 5 and 7). If additional 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(B)(1) and 2.2(B)(2) above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524.
- (5) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0524(a) and 17.0508(f)]
- (a) The Permittee shall operate and maintain the combustion turbines, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction in accordance with §60.4333. The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524, specifically with requirements of 40 CFR 60.11(d), if the Permittee, to the extent practicable, does not maintain and operate combustion turbines including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, at all times including periods of startup, shutdown, and malfunction.
- (b) The Permittee shall install, certify, maintain and operate a NOx continuous emissions monitoring system (CEMS) on each combined cycle and simple cycle turbine stack or ductwork as described in §60.4340(b), to demonstrate compliance with the applicable NOx emission limit. Excess emissions are based on a 30-day rolling average for combined cycle operation, and on a 4-hour rolling average for simple-cycle operation, and shall be determined in accordance with §60.4345 and §60.4350. For operation periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard in accordance with §60.4380(b)(3). If the NOx CEMS does not comply with the requirements of §60.4340(b) and §60.4345, or the NOx emissions (except during startups, shutdowns, and malfunction) exceeds the applicable NOx limit, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524
- (c) For natural gas, the Permittee shall demonstrate compliance with the applicable SO₂ emission limit by using representative fuel sampling data showing sulfur content of the fuel does not exceed 0.060 lb SO₂/MMBtu in accordance with 60.4365(b). For natural gas, the Permittee shall provide at a minimum the amount of data in Section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75. The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524, if the Permittee does not make the above demonstration for natural gas, if the demonstrations indicate that the sulfur content of natural gas exceeds 0.060 lb SO₂/MMBtu, if the SO₂ emissions (excluding the emissions during startup, shutdown, and malfunction) from the combustion turbines exceeds the applicable emission limit, or if these records are not maintained.
- (d) For fuel oil, the Permittee shall demonstrate compliance with the applicable SO₂ emission limit by using representative fuel sampling data showing that the sulfur content of the fuel does not exceed 0.060 lb SO₂/MMBtu in accordance with §60.4370(a). For fuel oil, the Permittee shall use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to Part 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524, if the Permittee does not make the above demonstration for fuel oil, if the demonstrations indicate that the sulfur content of fuel oil exceeds 0.060 lb SO₂/MMBtu, if the SO₂ emissions (excluding the emissions during startup, shutdown, and

malfunction) from the combustion turbines exceeds the applicable emission limit, or if these records are not maintained.

(6) **Reporting** [WNCRAQA Code 4.0524(a) & 17.0508(f)]

The Permittee shall conduct reporting according to the following:

(a) The Permittee shall submit reports of excess emissions and monitor downtime in accordance with §60.7(c). Excess emissions must be reported for all periods of operation, including startup, shutdown, and malfunctions. All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [§60.4375(a), and §60.4395]

(i) Excess emissions and monitor downtime for the NO_x CEMS are defined as follows: [§60.4380(b)]

(a) Excess Emissions. To demonstrate compliance, an excess emission is any unit operating period in which the 30-day rolling average (for combined-cycle operation) or 4-hour rolling average (for simple-cycle operation) NO_x emission rate exceeds the applicable emission limit.

(b) Monitor Downtime. To demonstrate compliance, a period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_x and either CO₂ or O₂ concentration.

(c) For operating periods (i.e., 4-hour rolling or 30-day rolling periods) during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards (i.e., during fuel switches or hours with load changes across 75% peak load), the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard. [§60.4380(b)(3)]

(ii) Excess emissions and monitor downtime for the fuel sulfur content are defined as follows: [§60.4385]

(a) For samples of gaseous fuel, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(b) If the option to sample each delivery of fuel oil has been selected, the Permittee shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. The Permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and the Permittee shall evaluate excess emissions according to §60.4385(a). When all of the fuel from the delivery has been burned, the Permittee may resume using the as-delivered sampling option.

(c) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

(b) The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period

between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

(C) WNCRAQA CODE 4.0524 - NEW SOURCE PERFORMANCE STANDARDS

- (1) **Emission Limitation/Standard** To comply with 40 CFR Part 60, Subpart TTTT, "Standards of Performance for Greenhouse Gas Emissions from Electric Generating Units," the permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Chapter 4.0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart TTTT, including Subpart A "General Provisions." These standards were promulgated on October 23, 2015. This rule establishes standards for emissions of carbon dioxide (CO₂) for affected fossil fuel fired electric generating units (EGUs) constructed after January 8, 2014. The standard for newly constructed base load stationary combustion turbines that combust more than 90% natural gas on an annual heat input basis is 1,000 pounds CO₂/MWh gross energy output.
- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 17.0508(f)]
To assure compliance with the emissions limit above, the Permittee shall maintain purchase records of natural gas and No. 2 fuel oil. These records must be kept for a period of 3 years. [WNCRAQA Code 4.0524]

(D) WNCRAQA CODE 4.111 – MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

- (1) **Emission Limitation/Standard** For combustion turbines (Unit 5 and Unit 7), the Permittee shall demonstrate compliance upon startup with all applicable provisions, including emission limitations, operating limitations, monitoring, recordkeeping, and reporting contained in WNCRAQA Code 4.1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart YYYY "National Emission Standards of Hazardous Air Pollutants for Stationary Combustion Turbines." Beginning on the date on which all new, reconstructed, and existing stationary combustion turbines fire oil more than 1,000 hours in any calendar year, the Permittee shall demonstrate compliance with all applicable requirements under 40 CFR Part 63 Subpart YYYY for sources classified as "diffusion flame oil-fired stationary combustion turbines" as defined in §63.6175. If all new, reconstructed, and existing stationary combustion turbines fire oil more than 1,000 hours per calendar year but fail to meet all applicable requirements under 40 CFR Part 63 Subpart YYYY for "diffusion flame oil-fired stationary combustion turbines," the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.1111. [WNCRAQA Code 4.0524]
- (2) **Reporting** [WNCRAQA Code 17.0508(f)]
The Permittee shall submit the initial notification in accordance with §63.6145(d) and 40 CFR §63.9(a)(4)(ii) and submit notification just prior to the date on which all new, reconstructed, and existing stationary combustion turbines fire oil more than 1,000 hours in any calendar year to the WNC Regional Air Quality Agency and EPA-Region IV. [WNCRAQA Code 17.0508(f)]

(E) 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.

(F) WNCRAQA CODE 2.400 – CROSS STATE AIR POLLUTION RULE (CSAPR)

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

For the two combustion turbines (ID Nos. Unit 5 and Unit 7), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NO_x Annual Trading Program", Subpart BBBB "TR NO_x Ozone Season Trading Program", and Subpart CCCC "TR SO₂ Group 1 Trading Program".

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	See Section 2.6	WNCRAQA Code 4.0530 Actuals PAL
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
	Cross State Air Pollution Rule (CSAPR) requirements (see Section 2.2.E)	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

(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 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
 - (d) The annual SO₂ 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 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 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.

(E) WNCRAQA CODE 2.400 – CROSS STATE AIR POLLUTION RULE (CSAPR)

- (2) **Emission Limitation/Standard** [WNCRAQA Code 4.0521(d) & 17.0508(b)]
For the two combustion turbines (ID Nos. Unit 3 and Unit 4), the Permittee shall comply with all applicable requirements of 40 CFR Part 97, Subpart AAAAA "TR NOx Annual Trading Program", Subpart BBBBB "TR NOx Ozone Season Trading Program", and Subpart CCCCC "TR SO2 Group 1 Trading Program".

2.3 – Emission IDs AuxBoiler, DPH1A, and DPH2A

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

Regulated Pollutant	Limits / Standards	Applicable Regulation
N/A	Recordkeeping only: monthly fuel records (Auxboiler only)	WNCRAQA Code 4.0524 (40 CFR Part 60 Subpart Dc)
Hazardous Air Pollutants	See Section 2.3.B	WNCRAQA Code 4.1111 (40 CFR Part 63 Subpart DDDDD)
Particulate matter	0.37 pounds per million btu heat input	WNCRAQA Code 4.0503
Sulfur dioxide	2.3 pounds per million Btu heat input	WNCRAQA Code 4.0516
Particulate matter	See Section 2.6	WNCRAQA Code 4.0530 Actuals PAL
Visible emissions	20 percent opacity	WNCRAQA Code 4.0521

(A) WNCRAQA CODE 4.0524 - NEW SOURCE PERFORMANCE STANDARDS

This condition applies only to AuxBoiler.

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0524(a) & 17.0508(b)]
The permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Chapter 4.0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart Dc, "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," including Subpart A "General Provisions."
- (2) **Monitoring/Recordkeeping** [WNCRAQA Code 4.0524(a) and 17.0508(f)]
 - (a) The Permittee shall record and maintain records of the amount of fuel burned during each calendar month. Such records shall be maintained on site at the source for a period of two years following the date of such record. The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0524 if these records are not maintained.

(B) WNCRAQA CODE 4.01111 - NEW SOURCE PERFORMANCE STANDARDS

This condition applies to AuxBoiler, DPH1A and DPH1B.

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.1111(a) & 17.0508(b)]
The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in WNCRAQA Code 4.1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD. "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters." The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.
- (2) **Work Practice Standards** [WNCRAQA Code 4.1111(a) and 17.0508(f)]
The Permittee shall be in compliance with the work practice standards in this subpart. These standards apply at all times the affected unit is operating.

- (a) The Permittee shall conduct a tune-up of the AuxBoiler annually and DPH1A and DPH1B biennially as specified below:
 - (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may delay the burner inspection until the next scheduled or unscheduled unit shutdown);
 - (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);
 - (iv) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
 - (v) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer;
 - (vi) Each annual tune-up shall be conducted no more than 13 months after the previous tune-up;
 - (vii) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup;
 - (viii) At all times, you 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
 - (ix) The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.1111 if the requirements in condition (a) are not met.
- (3) **Monitoring/Recordkeeping** [WNCRAQA Code 4.1111(e) and 17.0508(f)]
The Permittee shall keep the following:
 - (a) A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv) .
 - (b) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (i) through (iii) below:
 - (i) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the source;

- (ii) A description of any corrective actions taken as a part of the combustion adjustment. This facility has had an energy assessment performed according to 40 CFR 63.7530(e) [i.e., Section 2.1 E.5.h.] and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended; and
 - (iii) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- (c) The associated records for Sections 2.3(E)(2) through (3).
- (d) The Permittee shall
- (i) Maintain records in a form suitable and readily available for expeditious review;
 - (ii) Keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
 - (iii) Keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.
 - (iv) The Permittee shall be deemed in noncompliance with WNCRAQA Code 4.1111 if records are not maintained as described in Sections 2.2.C.1.d through h.
- (4) **Reporting** [WNCRAQA Code 4.1111(e) and 17.0508(f)]
Pursuant to 40 CFR 63.7550(b), the Permittee shall submit compliance reports to the WNCRAQA on an annual basis. The Permittee shall submit the compliance report postmarked on or before January 30 of each calendar year for the preceding 12-month period.
- (a) This report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.
 - (b) The compliance report must contain the following information:
 - (i) Company name and address;
 - (ii) Process unit information, emissions limitations, and operating parameter limitations;
 - (iii) Date of report and beginning and ending dates of the reporting period;
 - (iv) The total operating time during the reporting period;
 - (v) If there are no deviations from the requirements of the work practice requirements in Section 2.3(E)(2) above, a statement that there were no deviations from the work

practice standards during the reporting period; and

- (vi) Include the date of the most recent tune-up for each unit required according to Section 2.3(E)(2). Include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown
- (c) For deviations from a work practice standard during the reporting period, the report must contain the following information:
 - (i) A description of the deviation and which emission limit or operating limit from which you deviated; and
 - (ii) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
- (d) Permittee shall be deemed in noncompliance with WNCRAQA Code 4.1111 if records are not maintained as described above in sections (a) through (c).

(C) WNCRAQA CODE 4.0503 – PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

This condition applies to AuxBoiler, DPH1A and DPH1B.

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0503(c) & 17.0508(b)]
Emissions of particulate matter from the combustion of natural gas that are discharged from the auxiliary boiler (AuxBoiler) and the two dew point heaters (DPH1A and DPH1B) into the atmosphere shall not exceed 0.37 pounds per million Btu heat input each.

(D) WNCRAQA CODE 4.0516 – SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

This condition applies to AuxBoiler, DPH1A and DPH1B.

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0516(a) & 17.0508(b)]
Emissions of sulfur dioxide from the auxiliary boiler (AuxBoiler) and the two dew point heaters (DPH1A and DPH1B) shall not exceed 2.3 pounds per million Btu heat input each. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

(E) WNCRAQA CODE 4.0521 – CONTROL OF VISIBLE EMISSIONS

This condition applies to AuxBoiler, DPH1A and DPH1B.

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0521(d) & 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.

2.4 - Emission Source ID Emergency Generators 2, 3, 4, 5 and Fire Pump Engine 2

Regulated Pollutant	Limits / Standards	Applicable Regulation
Hazardous air pollutants	Work practice standards	WNCRAQA Code 4.1111 (40 CFR Part 63, Subpart ZZZZ)

Regulated Pollutant	Limits / Standards	Applicable Regulation
Multiple pollutants	See Section 2.4.B(2) below	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart IIII)
Particulate matter	See Section 2.6	WNCRAQA Code 4.0530 Actuals PAL

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

- (1) **Applicability** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63.6595(a)(1)]
For Emergency Generators 2, 3, 4, 5 and Fire Pump Engine 2, the Permittee shall comply with the requirements of 40 CFR Part 63, Subpart ZZZZ, “National Emission Standards of Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)” by meeting the requirements of 40 CFR Part 60, Subpart IIII as specified in Section 2.G. above. No further requirements apply under 40 CFR Part 63, Subpart ZZZZ.

(B) WNCRAQA CODE 4.0524 – NEW SOURCE PERFORMANCE STANDARDS

- (1) **Applicability** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63.6595(a)(1)]
For Emergency Generators 2, 3, 4, 5 and Fire Pump Engine 2, the Permittee shall comply with all applicable provisions, including the emissions standards, notification, testing, reporting, recordkeeping, and monitoring requirements in accordance with WNCRAQA Code 4.0524, "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60, Subpart IIII, “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,” including Subpart A "General Provisions." [WNCRAQA Code 4.0524]
- (2) **Emissions Limitation/Standard** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63.6602]
- (a) The Permittee shall comply with the emission standards 40 CFR 60.4202 for all pollutants, for the same model year and maximum engine power for Emergency Generators 2, 3, 4, and 5. [40CFR 60.4205(b)]
- (b) For fire pump engines with a displacement of less than 30 liters per cylinder, Fire Pump Engine 2, the Permittee shall comply with the emission standards in Table 4 of 40 CFR 60 Subpart IIII, for all pollutants. [60.4205(c)]
- (3) **Monitoring, Installation, Collection, Operation, and Maintenance Requirements** [WNCRAQA Code 4.1111 & 17.0508(b) & 40 CFR 63.6625(e)]
- (a) The Permittee shall use diesel fuel in the engine that meets the requirements of 40 CFR 80.510(b) including:
- (i) a maximum sulfur content of 15 ppm; and
- (ii) a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]
- (b) The owner or operator must operate and maintain the engines and control devices in accordance with the manufacturer's written instructions. The owner or operator may only change those engine settings that are permitted by the manufacturer. The owner or operator shall also meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable. [§60.4211(a)]
- (c) The Permittee shall comply with the emission standards in Condition (B)(2) by purchasing an

engine certified to the emission standards in Condition (B)(2) for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission related specifications. [40CFR 60.4211(c)]

- (d) In order for the engines to be considered emergency stationary ICE under this condition, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited.
 - (i) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (ii) The Permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs i., below, for a maximum of 100 hours per calendar year.
 - (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - (iii) Emergency stationary ICE may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b) of this condition. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
 - (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
 - (d) The power is provided only to the facility itself or to support the local transmission and distribution system; and
 - (e) The Permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the Permittee.
- (e) To assure compliance, the Permittee shall perform inspections and maintenance on the engine

as recommended by the manufacturer per 40 CFR 60.4206 and 40 CFR 60.4211(a). The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) onsite and made available to an authorized representative upon request. The logbook shall record the following:

- (i) the date and time of each recorded action;
 - (ii) the results of each inspection;
 - (iii) the results of any maintenance performed on the engine;
 - (iv) any variance from manufacturer’s recommendations, if any, and corrections made;
 - (v) the hours of operation of the engine in emergency and non-emergency service. [40 CFR 60.4214(b)]
 - (vi) if a PM filter is used, records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached [40 CFR60.4214(c)]; and
 - (vii) documentation from the manufacturer that the engine is certified to meet the emission standards in condition c.
- (f) Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the requirements in conditions (a) through (f) are not met.

(4) **Reporting** [WNCRAQA Code 4.1111 & 17.0508(f) & 40 CFR 63.6625]

- (a) If the Permittee operates an emergency stationary that is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Paragraph (3)(d)(ii) or (iii), above, the Permittee shall submit an annual report according to the requirements at 40 CFR 60.4214(d). This report must be submitted to the Director of the Agency and the EPA. [40 CFR 60.4214(d)].

(C) WNCRAQA CODE 4.0521 – CONTROL OF VISIBLE EMISSIONS

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0521d) & 17.0508(b)]
Visible emissions from the 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.

2.5 – Emission IDs CTWR1 and CTWR2

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

Regulated Pollutant	Limits / Standards	Applicable Regulation
Particulate matter	$E = 55.0*(P)^{0.11} - 40$	WNCRAQA Code 4.0515
Particulate matter	See Section 2.6	WNCRAQA Code 4.0530 Actuals PAL

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

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0515(a) & 17.0508(b)]
Emissions of particulate matter from the cooling towers, CTWR1 and CTWR2, shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 55.0*(P)^{0.11} - 40 \quad \text{Where } E = \text{allowable emission rate in pounds per hour}$$

$$P = \text{process weight in tons per hour}$$

2.6 – Plantwide Applicability Limits

(A) Emission Limitation/Standard Particulate Matter (PM) and (PM-10)

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0530; 40 CFR 51.166(w)(7)]

- (a) The following Actuals Plantwide Applicability Limitations (Actuals PAL) shall not be exceeded:

Actuals Plantwide Applicability Limitations	
PAL Pollutant	PM
Actuals PAL	Plantwide actual PM emissions shall not exceed 108 tons per consecutive 12-month rolling period.
PAL Pollutant	PM-10
Actuals PAL	Plantwide actual PM-10 emissions shall not exceed 98 tons per consecutive 12-month rolling period.
Effective Date	June 1, 2020
Expiration Date	May 31, 2030
PAL Emissions Units	Unit 5, Unit 7, Unit 3 IC Turbine, Unit 4 IC Turbine AuxBoiler, DPH1A & DPH1B, CTWR1 & CTWR2 Emergency Generators 2, 3, 4, 5 and Fire Pump Engine 2 Heat 1 Other Sources: 18, 28, 29, 30

- (b) The definition of major modification at 40 CFR 51.166(b)(2) shall not apply with respect to particulate matter and PM-10 when the source is complying with the requirements under paragraph 40 CFR 51.166(w). Pursuant to 40 CFR 51.166(w)(2)(viii), a PAL major modification means any physical change in or change in the method of operation of the source that causes it to emit the PAL pollutant (PM and/or PM10) at a level equal to or greater than the PAL. The Permittee may make modifications or additions to the PAL emission units in 2.6(A)(1) (a) above, without requiring a modification of the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified in 2.6(A)(3) below and if the facility-wide actual emissions of the PAL pollutant do not exceed the PAL level specified in 2.6(A)(1)(a) above.
- (c) If the Permittee applies to renew the PAL permit in accordance with 40 CFR 51.166(w)(10) before the end of the PAL effective period, then the PAL permit shall not expire at the end of

the PAL effective period. It shall remain in effect until a revised PAL permit is issued. [40 CFR 51.166(w)(7)(iii)]

- (d) Once the PAL expires, the Permittee is subject to the requirements in 40 CFR 51.166(w)(9). Upon PAL permit expiration, the WNCRAQA shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the WNCRAQA determines is appropriate. The WNCRAQA will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR 51.166(w)(7)(v)]

(2) Testing [WNCRAQA Code 4.2609; 40 CFR §51.166(w)(12)(vi)]

- (a) The Permittee shall conduct a performance test, in accordance with General Condition JJ of Part I of this permit, by May 11, 2022 on Units 3 and 4 to validate the PM emission factors used in establishing the PAL. The emission factor shall be determined during the performance test at or near maximum representative operating conditions in accordance WNCRAQA Code 4.2600 “Source Testing” including a test protocol in accordance with 4.2603. Unless otherwise provided for in the test protocol, a separate test shall be conducted both when firing natural gas and No. 2 fuel oil for each operating mode. Based on the three-run arithmetic average result of the emission factor, the Agency will notify the Permittee if a revision to the PAL is required as described in (d) below.
- (b) No additional testing is required at this time; however, the WNCRAQA reserves the right to require appropriate testing at any time. If emission testing is required, the testing shall be performed in accordance with WNCRAQA Code 4.2609 and General Condition JJ. If the results of this testing indicate that the PM or PM-10 emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.6.A(1) above, the Permittee shall be deemed in noncompliance with Chapter 4 .0530.
- (c) The Permittee shall revalidate the emission factors and any other data used in Section 2.6.A(3) below for calculations of PM and PM-10 emissions through performance testing or other scientifically valid means approved by the WNCRAQA. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit (Permit No. 11-628B issued May 18, 2020), in accordance with General Condition JJ. If the Permittee does not perform this revalidation, the Permittee shall be deemed in noncompliance with Chapter 4 .0530.
- (d) If any emission factors or methods included in the monitoring provision in subparagraph 3 below are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results. If the emission factor to be revised is based on an WNCRAQA-approved stack test, the permit may be modified through the an administrative amendment in accordance to General Condition G.1. The Permittee shall not rely on the updated emission factor or method until they are approved by WNCRAQA and incorporated into the permit.

(3) Monitoring/Recordkeeping [WNCRAQA Code 4.5030; 40 CFR 51.166(w)(12) & (13)]

- (a) The Permittee shall keep records of the monthly PM and PM-10 emissions, including emissions from startups, shutdowns, and malfunctions, from each source listed below in a logbook (written or electronic). The Permittee shall be deemed in non-compliance with WNCRAQA Code 4.0530, if these records are not kept or if the limit in 2.6(A)(1)(a) is exceeded. Emissions, shall be determined as follows:

Emission Unit ID	Unit Description	Method	Emission Factor Value	Emission Calculation Methodology
Unit 5	Unit 5 - NG/NOx. Fuel oil fired simple/combined cycle combustion turbine	10 - Site EF (Vendor)	6.20 lb/hr (N.G.)(F+C) 39.7 lb/hr (Oil)(F+C)	Hours of Gas X Emission Factor Hours of Oil X Emission Factor
Unit 7	Unit 7 - NG/NOx. Fuel oil fired simple/combined cycle combustion turbine	10 - Site EF (Vendor)	6.20 lb/hr (N.G.)(F+C) 39.7 lb/hr (Oil)(F+C)	Hours of Gas X Emission Factor Hours of Oil X Emission Factor
Unit 3 IC Turbine	Unit 3 IC Turbine AV3 - Natural gas / No.2 Oil Fired Simple Cycle Combustion Turbine (1,929 MM Btu/hr)	10 - Site EF	0.0076 lb/MMBtu (Oil) 0.003 lb/MMBtu (NG)	Heat Input Oil X Emission Factor Heat Input NG X Emission Factor
Unit 4 IC Turbine	Unit 4 IC Turbine - AV4 - Natural gas / No.2 Oil Fired Simple Cycle Combustion Turbine (1,929 MM Btu/hr)	10 - Site EF	0.0076 lb/MMBtu (Oil) 0.003 lb/MMBtu (NG)	Heat Input Oil X Emission Factor Heat Input NG X Emission Factor
AuxBoiler	Aux Boiler - (Natural gas, 47.6 MMBtu/hr)	8 - AP-42	7.6 lb/mmscf	Assume PTE = 1.63 tpy; Monthly = 1.55/12 = 0.13 tons per month
Emergency Generator 2	Emergency Generator 2 (Blackstart, Diesel-fired 1,400 hp)	8 - NSPS	3.29E-4 lb/hp-hr	Assume PTE = 0.12 tpy; Monthly = 0.12/12 = 0.01 tons per month
Emergency Generator 3	Emergency Generator 3 (Blackstart, Diesel-fired 1,400 hp)	8 - NSPS	3.29E-4 lb/hp-hr	Assume PTE = 0.12 tpy; Monthly = 0.12/12 = 0.01 tons per month
Emergency Generator 4	One (1) 762 HP diesel-fired emergency generator for the water treatment system	8 - AP-42	0.0007 lb/hp-hr	Assume PTE = 0.13 tpy; Monthly = 0.13/12 = 0.01 tons per month
Emergency Generator 5	One (1) 142 HP diesel-fired emergency generator for the Landfill Leachate System	8 - AP-42	0.0022 lb/hp-hr	Assume PTE = 0.08 tpy; Monthly = 0.08/12 = 0.006 tons per month
Fire Pump Engine 2	Fire Pump Engine 2 (Diesel-fired 335 hp)	8 - NSPS	3.29E-4 lb/hp-hr	Assume PTE = 0.03 tpy; Monthly = 0.03/12 = 0.003 tons per month
DPH1A & DPH1B	Two Dew Point Heaters (Natural gas-fired 8.8 MMBtu/hr each)	8 - AP-42	7.6 lb/mmscf	Assume PTE = 0.65 tpy; Monthly = 0.65/12 = 0.05 tons per month
CTWR1 & CTWR2	Two Cooling Towers	8 - AP-42	0.0005% Drift Rate	Assume PTE = 1.53 tpy; Monthly = 1.53/12 = 0.13 tons per month
Heat 1	One (1) 4.00 million BTU per hour natural gas-fired gas heater	8 - AP-42	7.6 lb/mmscf	Assume PTE = 0.07 tpy; Monthly = 0.07/12 = 0.006 tons per month
Other Sources				
18	Ash handling /Ash pond / Landfill	8 - AP-42	3.2E-3 lb/ton (all four transfer points)	Throughput X Emission Factor
28	Road Dust	8 - AP-42	Haul Road Calculations	Calculate Emissions Based on Truck Traffic
29	Four (4) 2.15 MMBtu/hr natural gas-fired turbine building heaters	8 - AP-42	0.00745 lb/MMBtu	Assume PTE = 0.28; Monthly = 0.28/12 = 0.023 tons per month
30	One (1) 0.0808 MMBtu/hr natural gas-fired auxiliary boiler building heater	8 - AP-42	0.00745 lb/MMBtu	Assume PTE = 0.03; Monthly = 0.03/12 = 0.003 tons per month

(b) The Emission Calculation Methodology listed in the table above shall be used to report actual

emissions. The Permittee shall record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for a PAL emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit. Notwithstanding the foregoing, the Permittee may consider actual production or operating data in determining its emissions for such a period if the Permittee has written records of such data and if the data are substantially the same as or similar in form or content to the monitoring data required by the PAL permit. The Permittee shall be deemed in noncompliance with Chapter 4 .0530 if the Permittee does not comply with the requirements of this Section 2.6(A). [40 CFR 51.166(w)(12)(vii)]

- (c) The Permittee shall retain a copy of the following records on site, in written or electronic format, for the duration of the PAL effective period plus 5 years:
 - (i) A copy of the PAL permit application and any applications for revisions to the PAL; and,
 - (ii) Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of these PAL provisions.

The Permittee shall be deemed in noncompliance with Chapter 4. 0530 if these records are not maintained. [40 CFR 51.166(w)(7)(viii) and 51.166(w)(13)(ii)]

(4) Reporting [WNCRAQA Code 4.5030; 40 CFR 51.166(w)(14)]

The owner or operator shall submit monitoring reports and prompt compliance reports to the reviewing authority in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR 51.166(w)(14)(i) through (iii).

- (a) Semi-annual Report - A semi-annual report shall be submitted to the Director 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. This report shall contain the information required in paragraphs 51.166(w)(14)(i)(a) through (g).
 - (i) The identification of owner or operator and the permit number.
 - (ii) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to 2.6(A)(3) and 40 CFR 51.166(w)(13)(i).
 - (iii) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - (iv) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
 - (v) The number, duration, and cause of any deviations or monitoring malfunctions (e.g. other than the time associated with zero and span calibration checks), and any corrective action taken.
 - (vi) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR 51.166 (w)(12)(vii).

- (vii) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (b) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:
 - (i) The identification of owner or operator and the permit number;
 - (ii) The PAL requirement that experienced the deviation or that was exceeded;
 - (iii) Emissions resulting from the deviation or the exceedance; and
 - (iv) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.
- (c) Re-validation results. The owner and operator shall submit to the Director the results of any re-validation within three months after completion of such revalidation.

2.7 – Facility Wide

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

Regulated Pollutant	Limits / Standards	Applicable Regulation
Toxic Air Pollutants	Local-enforceable only Ambient concentrations of TAPs shall not exceed corresponding acceptable ambient levels (AALs) in Chapter 4.1100 of the WNCRAQA Code.	WNCRAQA Code 17.0700

(A) WNCRAQA CODE 4.1100 – CONTROL OF TOXIC AIR POLLUTANTS (LOCAL ENFORCEABLE ONLY)

- (1) **Emission Limitation/Standard** [WNCRAQA Code 4.1100 & 17.0700]
The Permittee has demonstrated compliance with the following permit limits in accordance with the completed application received January 28, 2016. All toxic air pollutants (TAPs) covered in Chapter 4.1104 for all sources at the facility have been evaluated. Sources evaluated, excluding the sources exempt from evaluation under Chapter 17.0702, are listed below with the modeled emission rates. Modeled emission rates were optimized to represent worst case emissions.:

Emission Source	Toxic Air Pollutant	Emission Limit(s)
Heat 1	Arsenic	0.194 lb/yr

	Benzene	6.36 lb/yr
	Beryllium	0.323 lb/yr
	Cadmium	1.54 lb/yr
	Chromium VI	0.0111 lb/day
	Formaldehyde	0.00656 lb/hr
	Manganese	0.00110 lb/day
	Mercury	0.00803 lb/day
	Nickel	0.0246 lb/day

(2) **Emission Limitation/Standard** [WNCRAQA Code 4.1100 & 17.0700]

The facility shall be operated and maintained in such a manner that any new, existing or increased actual emissions of any TAP listed in WNCRAQA Code 17.0711 or in this permit from all sources at the facility (excluding those sources exempt under WNCRAQA Code 17.0702 "Exemptions"), including fugitive emissions and emission sources not otherwise required to have a permit, will not exceed its respective TPER listed in WNCRAQA Code 17.0711 without first obtaining an air permit to construct or operate.

Pollutant	TPER Limitations			
	Carcinogens (lb/yr)	Chronic Toxicants (lb/day)	Acute Systemic Toxicants (lb/hr)	Acute Irritants (lb/hr)
Acetaldehyde				6.8
Benzo(a)pyrene	2.2			
Benzyl Chloride			0.13	
Carbon Disulfide		3.9		
Chlorobenzene		46		
Ethylene Dibromide	27			
Ethylene Dichloride	260			
n-Hexane		23		
Methyl Chloroform		250		
Methyl Ethyl Ketone		78		22.4
Methylene Chloride	1,600		0.39	
Phenol			0.24	
Polychlorinated Biphenyls	5.6			
Styrene			2.7	
Toluene		98		14.4
Trichloroethylene	4,000			
Trichlorofluoromethane			140	
Vinyl Chloride	26			
Xylenes		57		16.4

SECTION 3 - ACID RAIN PROGRAM REQUIREMENTS

ORIS code: 2706

(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 Unit	Reduction Requirement	Applicability
Unit 3 IC Turbine, Unit 4 IC Turbine, Unit 5 and Unit 7	SO ₂ Allowances under Table 2, 3, or 4 of 40 CFR Part 73	SO ₂ allowances are not allocated by U.S. EPA for new units under 40 CFR Part 72.
	NO _x Limit	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 October 20, 2020.

SECTION 4 - 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 startup and shutdown 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 startup and shutdown 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 six 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. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

(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 ID	Emission Source Description
1	Two (2) 1,804,000-gallon capacity aboveground No. 2 fuel oil storage tanks
4*	One (1) 4.00 million BTU per hour natural gas-fired gas heater
8	Two (2) 6,200-gallon capacity lube oil tanks
9	Two (2) 250-gallon capacity false start drain tanks
17	One (1) 500-gallon capacity mobile diesel fuel storage tank
18*	Ash handling /Ash pond / Landfill
23	Two (2) 400 gallon capacity 19% aqueous ammonia stainless steel totes for Auxiliary Boiler Chemical Addition
25	Two (2) 22,000 gallon capacity 19% aqueous ammonia storage tank sized for 168 hours full duct-fired load for SCR Injection
26	One (1) 1,250,000-gallon capacity aboveground No. 2 fuel oil storage tank
28*	Road Dust
29*	Four (4) 2.15 MMBtu/hr natural gas-fired turbine building heaters
30*	One (1) 0.808 MMBtu/hr natural gas-fired auxiliary boiler building heater
32	One (1) 500-gallon double wall diesel tank for use in the fuel containment area
33	One (1) 500-gallon double wall gasoline tank for use in the fuel containment area
34	One (1) 500-gallon kerosene fuel tank
35	One (1) portable 250-gallon fuel tank
36	Two (2) 6,150-gallon storage tank for CT Lube Oil
37	Two (2) 900-gallon No. 2 diesel fuel tanks for EMG
38	One (1) 460-gallon No. 2 diesel fuel storage tank for emergency fire pump
39	Two (2) 12,500-gallon storage tanks for ST Lube Oil
40	Two (2) 230-gallon storage tanks for Electric Hydraulic Control Oil
41	One (1) 460-gallon No. 2 diesel fuel storage tank for emergency fire pump
42	Two (2) 2000-gallon diesel drain tank for false start
43	Two (2) 300-gallon drain tanks for fuel gas condensate
45	One (1) 500-gallon kerosene fuel tank for use in the fuel oil containment area

*Emissions source is subject to Actuals Plantwide Applicability Limitations (Actuals PAL) for PM and PM-10.

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
CSAPR	Cross State Air Pollution Rule
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
PAL	Plantwide Applicability Limitation
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
PTE	Potential to Emit
RICE	Reciprocating Internal Combustion Engine
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
TAP	Toxic Air Pollutant
TPY	Tons Per Year
VOC	Volatile Organic Compound
WNCRAQA	Western North Carolina Regional Air Quality Agency