## 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 the 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: BorgWarner Turbo Systems

**Facility ID:** 11-773

Facility Site Location: 1849 Brevard Road

City, State, Zip: Arden, North Carolina 28704

Facility Mailing Address: P.O. Box 15075

City, State, Zip: Asheville, North Carolina 28813

Permit Number: 11-773-19 Replaces Permit Number: 11-773-14

Issue Date:

Effective Date:

Renewal Application Due Date:

November 12, 2019

January 1, 2020

July 4, 2024

Expiration Date: December 31, 2024

Ashley Featherstone, Interim 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 the 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
AEC-1	One (1) diesel-fired internal combustion engine test cell for engines with a maximum output rating of 1,500 horsepower	NA	NA
AEC-2	One (1) diesel-fired internal combustion engine test cell for engines with a maximum output rating of 1,500 horsepower	NA	NA
AEC-3	One (1) diesel-fired internal combustion engine test cell for engines with a maximum output rating of 1,500 horsepower	NA	NA
AEC-4	One (1) diesel-fired internal combustion engine test cell for engines with a maximum output rating of 1,500 horsepower that can also be used to test gasoline- fired internal combustion engines with a maximum output rating of 375 horsepower	NA	NA
TO-2	One (1) 2.5 million BTU per hour natural gas-fired thermal oxidizer with a capacity of 150 gallons per hour	NA	NA
IC-1*	One (1) 150-kilowatt (225 horsepower) natural gas-fired emergency generator	NA	NA
IC-2*	One (1) 35-kilowatt (68 horsepower) natural gas-fired emergency generator	NA	NA
IC-3*	One (1) 175-horsepower diesel-fired fire pump	NA	NA
ES-120*	One (1) 1,000-gallon aboveground gasoline storage tank	NA	NA

<sup>\*</sup>Because this source is subject to a MACT and/or NSPS 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.

#### **SECTION 2 - SPECIFIC CONDITIONS AND LIMITATIONS**

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The emission source(s) and associated air pollution control device(s) 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 Sources ID AEC-1, AEC-2, AEC-3, AEC-4

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

Regulated Pollutant	Limits / Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million BTU heat input	WNCRAQA Code 4.0516
Nitrogen oxides	250,000 gallons diesel fuel per consecutive 12- month period	WNCRAQA Code 4.0530

# (A) WNCRAQA CODE 4.0516 - SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

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

Emissions of sulfur dioxide from these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

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

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

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

No monitoring is required for sulfur dioxide emissions from the combustion of diesel fuel in these sources, however the WNCRAQA reserves the right to require appropriate monitoring at a later date.

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

No recordkeeping is required for sulfur dioxide emissions from the combustion of diesel fuel in these sources, however the WNCRAQA reserves the right to require appropriate recordkeeping at a later date.

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

No reporting is required for sulfur dioxide emissions from the combustion of diesel fuel in these sources, however the WNCRAQA reserves the right to require appropriate reporting at a later date.

#### (B) WNCRAQA CODE 4.0530 - PREVENTION OF SIGNIFICANT DETERIORATION

#### (1) **Emission Limitation/Standard** [WNCRAQA Code 4.0530(g) & 17.0508(b)]

In order to preclude applicability of the WNCRAQA Code 4.0530(g) for major sources and major modifications, these sources shall combust no more than 250,000 gallons total of diesel fuel per consecutive 12-month period.

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

No testing is required at this time, however the WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with the WNCRAQA Code 4.2612 and General Condition JJ. If the results of this test

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are above the limit given in Section 2.1(B)(1) above, the Permittee shall be deemed in noncompliance with the WNCRAQA Code 4.0530.

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

To assure compliance with the limitation given in Section 2.1(B)(1) above, the Permittee shall monitor the total amount (gallons) of diesel fuel combusted by these sources. The amount shall be calculated monthly as the sum of each consecutive 12-month period. If the required monitoring is not conducted, the Permittee shall be deemed in noncompliance with the WNCRAQA Code 4.0530.

#### (4) **Recordkeeping** [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 date and time of the required monitoring; and
- (b) The results of the required monitoring noting whether or not noncompliant conditions were observed.

The Permittee shall be deemed in noncompliance with the WNCRAQA Code 4.0530 if these records are not maintained.

#### (5) **Reporting** [WNCRAQA Code 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.

#### 2.2 - Emission Source ID TO-2

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

# (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 this source shall not exceed an allowable emission rate as calculated by the following equation:

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

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

No testing is required at this time, however the WNCRAQA reserves the right to require appropriate testing at a later date. If emissions testing is required, the testing shall be performed in accordance with the WNCRAQA Code 4.2609 and General Condition JJ. If the results of this test are above the limit given in Section 2.2(A)(1) above, the Permittee shall be deemed in

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noncompliance with the WNCRAQA Code 4.0515

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

No monitoring/recordkeeping/reporting is required for particulate matter emissions from this source, however the WNCRAQA reserves the right to require appropriate monitoring at a later date.

#### 2.3 – Emission Source ID IC-1

Regulated Pollutant	Limits / Standards	Applicable Regulation
NO <sub>X</sub> , CO, VOC	Emissions of NOx, CO, and VOC shall not exceed 2.0, 4.0, and 1.0 grams per horsepower-hour, respectively.	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart JJJJ)
Hazardous air pollutants	Comply with 40 CFR Part 60, Subpart JJJJ	WNCRAQA Code 4.1111 (40 CFR Part 63, Subpart ZZZZ)

#### (A) WNCRAQA CODE 4.524 – NEW SOURCE PERFORMANCE STANDARDS

(1) Emission Limitations/Standards [WNCRAQA Code 4.0524(a) & 17.0508(b)]
This source shall be operated in accordance with 40 CFR Part 60 – "Standards of Performance for New Stationary Sources." The requirements are stated in 40 CFR Part 60, Subpart A – "General Provisions" and 40 CFR 60, Subpart JJJJ – "Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE)."

(a) This emergency engine is certified by the manufacturer to comply with the following standards set forth in Table 1 of Subpart JJJJ [60.4233(e) and 60.4243(b)(1)] for spark ignition (SI) engines manufactured after January 1, 2009:

NOx: 2.0 g/hp-hr or 160 ppmvd at 15 percent  $O_2$  CO: 4.0 g/hp-hr or 540 ppmvd at 15 percent  $O_2$  VOC: 1.0 g/hp-hr or 86 ppmvd at 15 percent  $O_2$ 

- (b) The Permittee shall operate and maintain the engine according to the manufacturer's written instructions or as provided in 60.4243(a)(2) (see Condition 2.4(A)(2)(a)(ii)) over the entire life of the engine. [60.4243(b)(1) and 60.4234].
- (c) Because this engine is considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations, as described below, is prohibited. [60.4243(d)]
  - (i) There is no time limit on the use of emergency stationary ICE in emergency situations. [60.4243(d)(1)]
  - (ii) Emergency stationary ICE may be operated for any combination of the following purposes for a maximum of 100 hours per calendar year:
    - Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization, or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator

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for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [60.4243(d)(2)(i)]

- Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [60.4243(d)(2)(ii)]
- Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [60.4243(d)(2)(iii)]
- (iii) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response, as provided above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except 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:
  - The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [60.4243(d)(3)(i)(A)]
  - 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. [60.4243(d)(3)(i)(B)]
  - The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [60.4243(d)(3)(i)(C)]
  - The power is provided only to the facility itself or to support the local transmission and distribution system. [60.4243(d)(3)(i)(D)]
  - The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [60.4243(d)(3)(i)(E)]
- (d) The Permittee may operate the engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. [60.4243(e)]
- (2) <u>Testing, Monitoring and Recordkeeping</u> [WNCRAQA Code 4.0524(a) & 17.0508(f)] The Permittee must follow the compliance requirements in 40 CFR 60.4243. Compliance options depend on whether the engine has been certified by the manufacturer to meet the emissions standards in 60.4233.

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- (a) Because the SI engine is certified by the manufacturer to meet the emission standards in 60.4233(e), the Permittee must meet one of the requirements below to demonstrate compliance [60.4243(b)(1)]:
  - (i) If the certified stationary SI internal combustion engine and control device (if any) are operated and maintained according to the manufacturer's emission-related written instructions, the Permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required [60.4243(a)(1)] or
  - (ii) If the certified stationary SI internal combustion engine and control device are not operated and maintained according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee will be required to conduct an initial performance test within 1 year of engine startup to demonstrate compliance. Subsequent performance testing is not required unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). [60.4243(a)(2)(ii)]
- (b) If performance testing is required, the testing shall be performed in accordance with 40 CFR 60.4244 and General Condition JJ located in the General Conditions in Section 3 of the permit. If the results are above the standards given in Section 2.3(A)(1)(a) above, the Permittee shall be deemed in noncompliance with the standards in 40 CFR Part 60, Subpart JJJJ.
- (3) <u>Additional Recordkeeping and Reporting Requirements</u> [WNCRAQA Code 4.0524(a) & 17.0508(f)]

The Permittee must keep records of the following information as specified in 40 CFR 60.4245:

- (a) All notifications submitted to comply with this subpart and all documentation supporting any notification. [60.4245(a)(1)]
- (b) Maintenance conducted on the engine. [60.4245(a)(2)]
- (c) Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable. [60.4245(a)(3)]
- (d) If performance testing is required, the Permittee must submit a copy of each performance test within 60 days after the test has been completed. [60.4245(d)]
- (e) If the emergency stationary SI ICE operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in 0.4243(d)(3)(i), an annual report must be submitted according to the requirements in paragraphs 60.4245 (e)(1) through (3).

#### (B) WNCRAQA CODE 4.1111 - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

(1) Emission Limitation/Standard [WNCRAQA Code 4.1111 & 17.0508(b)]

This source shall be operated in accordance with 40 CFR Part 63 – "National Emission Standards for Hazardous Air Pollutants for Source Categories." The requirements are stated in 40 CFR Part 63, Subpart A – "General Provisions" and 40 CFR 63, Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines."

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Compliance with 40 CFR 63, Subpart ZZZZ is achieved by compliance with 40 CFR 60, Subpart JJJJ. [40 CFR 63.6590(c)(1)]

#### 2.4 – Emission Source ID IC-2

Regulated Pollutant	Limits / Standards	Applicable Regulation
Hazardous air pollutants	Best management practices	WNCRAQA Code 4.1111 (40 CFR Part 63, Subpart ZZZZ)

#### (A) WNCRAQA CODE 4.524 – 4.1111 - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

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

This source shall be operated in accordance with 40 CFR Part 63 – "National Emission Standards for Hazardous Air Pollutants for Source Categories." The requirements are stated in 40 CFR Part 63, Subpart A – "General Provisions" and 40 CFR 63, Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE)." The Permittee must perform the following management practice requirements [40 CFR 63.6603(a) and Table 2d]:

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

Exceptions to items (a), (b), and (c): If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the above schedule, or if performing the management practice on the above schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Any failure to perform the management practice on the schedule required must be reported along with the Federal, State or local law under which the risk was deemed unacceptable. As an option, an oil analysis program as described in 40 CFR 63.6625(j) may be utilized in order to extend the specified oil change requirement. The EPA Administrator may be petitioned pursuant to the requirements of 40 CFR 63.6(g) to implement alternative work practices.

- Oil Analysis Program Requirements. If an oil analysis program is used to extend the specified oil change requirement above, the oil analysis must be performed at the same frequency specified for changing the oil in Condition 2.4(A)(1)(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or

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operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

- (d) Operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]
- (e) Operate and maintain the RICE and control device (if any) according to the manufacturer's emission related written instructions or maintenance plan developed by the Permittee that must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e), 40 CFR 63.6640(a), and Table 6]
- (f) Install non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
- (g) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]
- (h) Because this engine is considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations, as described below, is prohibited. [63.4240(f)]
  - (i) There is no time limit on the use in emergency situations. [63.4240(f)(1)]
  - (ii) Emergency stationary ICE may be operated for any combination of the following purposes for a maximum of 100 hours per calendar year:
    - Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization, or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [63.4240(f)(2)(i)]
    - Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [63.4240(f) (2)(ii)]
    - Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [63.4240(f)(2)(iii)]
  - (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 and

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emergency demand response, as provided above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except 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:

- The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [63.4211(f) (4)(ii)(A)]
- 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. [63.4211(f) (4)(ii)(B)]
- The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [63.4211(f) (4)(ii)(C)]
- The power is provided only to the facility itself or to support the local transmission and distribution system. [63.4211(f) (4)(ii)(D)]
- The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [63.4211(f) (4)(ii)(E)]

#### (2) Monitoring and Recordkeeping [WNCRAQA Code 4.0524(a) & 17.0508(f)]

- (a) The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) were operated and maintained according to (the manufacturer's emission-related operation and maintenance instructions) or the maintenance plan developed by the Permittee. [40 CFR 63.6655(e)]
- (b) If the emergency engine does not meet the standards applicable to non-emergency engines, The Permittee must keep records of the hours of operation of the engine that is recorded through the nonresettable hour meter. The Permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR 63.6655(f)]
- (c) Each record must be kept readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [40 CFR 63.6660(c)]

#### 2.5 – Emission Source ID IC-3

Regulated Pollutant	Limits / Standards	Applicable Regulation
NMHC (VOC), NO <sub>X</sub> , CO, PM	Emissions of NMHC+NOx, CO, and PM shall not exceed 2.0, 4.0, and 1.0 grams per horsepower-hour, respectively.	WNCRAQA Code 4.0524 (40 CFR Part 60, Subpart IIII)

Regulated Pollutant	Limits / Standards	Applicable Regulation
Hazardous air pollutants	Comply with 40 CFR Part 60, Subpart IIII	WNCRAQA Code 4.1111 (40 CFR Part 63, Subpart ZZZZ)

#### (A) WNCRAQA CODE 4.524 – NEW SOURCE PERFORMANCE STANDARDS

(1) Emission Limitations/Standards [WNCRAQA Code 4.0524(a) & 17.0508(b)]
This source shall be operated in accordance with 40 CFR Part 60 – "Standards of Performance for New Stationary Sources." The requirements are stated in 40 CFR Part 60, Subpart A – "General Provisions" and 40 CFR 60, Subpart IIII – "Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)."

(a) This fire pump engine must comply with the emission standards in Table 4 of Subpart IIII, for all pollutants. [60.4205(c)]:

NMHC+NOx: 7.8 g/hp-hr CO: 2.6 g/hp-hr PM: 0.40 g/hp-hr

- (b) These engines shall use diesel fuel with a maximum sulfur content of less than 15 ppm and with either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [60.4207(b), and 80.510(b)]
- (c) If the emergency stationary CI internal combustion engine does not meet the standards applicable to non-emergency engines, the engines shall be equipped with a non-resettable hour meter prior to startup. [60.4209(a)]
- (d) The Permittee shall operate and maintain the engine according to the manufacturer's written instructions or as provided in 60.4211(g)(2) (see Condition 2.6(A)(2)(a)(ii)) over the entire life of the engine. [60.4206(a)(1) and 60.4211(a)]. Except as provided in 60.4211(g)(2), the Permittee shall:
  - (i) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions. [60.4211(a)(1)]
  - (ii) Change only those emission-related settings that are permitted by the manufacturer. [60.4211(a)(2)]
  - (iii) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable. [60.4211(a)(3)]
- (e) Because this engine is considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations, as described below, is prohibited. [60.4211(f)]
  - (i) There is no time limit on the use of emergency stationary ICE in emergency situations. [60.4211(f)(1)]
  - (ii) Emergency stationary ICE may be operated for any combination of the following purposes for a maximum of 100 hours per calendar year:
    - Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local

government, the manufacturer, the vendor, the regional transmission organization, or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [60.4211(f)(2)(i)]

- Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [60.4211(f) (2)(ii)]
- Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [60.4211(f)(2)(iii)]
- (iii) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response, as provided above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except 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:
  - The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [60.4211(f) (3)(i)(A)]
  - 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. [60.4211(f)(3)(i)(B)]
  - The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [60.4211(f)(3)(i)(C)]
  - The power is provided only to the facility itself or to support the local transmission and distribution system. [60.4211(f)(3)(i)(D)]
  - The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. [60.4211(f)(3)(i)(E)]
- (2) <u>Testing, Monitoring and Recordkeeping</u> [WNCRAQA Code 4.0524(a) & 17.0508(f)] The Permittee must follow the compliance requirements in 40 CFR 60.4211. Compliance options depend on whether the engine has been certified and whether manufacturer's written instructions have been followed.

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- (a) Because the CI fire pump engine was manufactured prior to the applicable model year in Table 3 of Subpart IIII and must comply with the emission standards specified in 60.4205(c), compliance must be demonstrated according to one of the following methods [60.4211(b)]:
  - (i) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [60.4211(b)(1)]
  - (ii) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly. [60.4211(b)(2)]
  - (iii) Keeping records of engine manufacturer data indicating compliance with the standards. [60.4211(b)(3)]
  - (iv) Keeping records of control device vendor data indicating compliance with the standards. [60.4211(b)(4)]
  - (v) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 60.4212, as applicable. [60.4211(b)(5)]
- (b) If the engine and control device (if any) are not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or if the emission-related settings are changed in a way that is not permitted by the manufacturer, the Permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the Permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [60.4211(g)(2)]
- (c) If performance testing is required, the testing shall be performed in accordance with 40 CFR 60.4244 and General Condition JJ located in the General Conditions in Section 3 of the permit. If the results are above the standards given in Section 2.6(A)(1)(a) above, the Permittee shall be deemed in noncompliance with the standards in 40 CFR Part 60, Subpart IIII.
- (3) <u>Additional Recordkeeping and Reporting Requirements</u> [WNCRAQA Code 4.0524(a) & 17.0508(f)]

The Permittee must keep records of the following information as specified in 40 CFR 60.4214:

(a) If the emergency stationary CI ICE operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in 0.4211(f)(3)(i), an annual report must be submitted according to the requirements in paragraphs 60.4214 (d)(1) through (3).

#### (B) WNCRAQA CODE 4.1111 - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

(1) Emission Limitation/Standard [WNCRAQA Code 4.111 & 17.0508(b)]
This source shall be operated in accordance with 40 CFR Part 63 – "National Emission Standards for Hazardous Air Pollutants for Source Categories." The requirements are stated in 40 CFR Part 63, Subpart A – "General Provisions" and 40 CFR 63, Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines."

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Compliance with 40 CFR 63, Subpart ZZZZ is achieved by compliance with 40 CFR 60, Subpart IIII. [40 CFR 63.6590(c)(1)]

#### 2.6 – Emission Source ID ES-120

Regulated Pollutant	Limits / Standards	Applicable Regulation
Hazardous air pollutants	Management practices	WNCRAQA Code 4.1111 (40 CFR Part 63, Subpart CCCCCC)

#### (A) WNCRAQA CODE 4.1111 - MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

#### (1) Emission Limitation/Standard [WNCRAQA Code 4.111 & 17.0508(b)]

This source shall be operated in accordance with 40 CFR Part 63 – "National Emission Standards for Hazardous Air Pollutants for Source Categories." The requirements are stated in 40 CFR Part 63, Subpart A – "General Provisions" and 40 CFR 63, Subpart CCCCC – "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities." Gasoline must not be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (a) Minimize gasoline spills. [40 CFR 63.11116(a)(1)]
- (b) Clean up spills as expeditiously as practicable. [40 CFR 63.11116(a)(2)]
- (c) Cover all open gasoline containers and all gasoline storage tank fill pipes with a gasketed seal when not in use. [40 CFR 63.11116(a)(3)]
- (d) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [40 CFR 63.11116(a)(4)]

#### (2) **Recordkeeping** [WNCRAQA Code 4.1111(a) &17.0508(f)]

Records documenting the gasoline throughput must be maintained, and must be made available within 24 hours of a request by the WNCRAQA. [40 CFR 63. 11116(b)]

#### 2.7 – Facility-Wide

Regulated Pollutant	Limits / Standards	Applicable Regulation
Visible emissions	20 percent opacity	WNCRAQA Code 4.0521
Odorous emissions	Local-enforceable only Operational practices	WNCRAQA Code 4.1806
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 4.0521 - CONTROL OF VISIBLE EMISSIONS

(Note: Requirements for ES-112 are in Permit Condition 2.2(B) above.)

#### (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

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more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

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

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

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

No monitoring/recordkeeping/reporting is required for visible emissions from these sources, however the WNCRAOA reserves the right to require appropriate monitoring at a later date.

# (B) WNCRAQA CODE 4.1806 - CONTROL AND PROHIBITION OF ODOROUS EMISSIONS (LOCAL-ENFORCEABLE ONLY)

#### (1) **Emission Limitation/Standard** [WNCRAQA Code 4.1806(e) & 17.0508(b)]

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

#### (C) WNCRAQA CODE 17.0700 - TOXIC AIR POLLUTANT PROCEDURES (LOCAL-ENFORCEABLE ONLY)

Pursuant to WNCRAQA Code 17.0700 and 4.1100, an application for a toxic air pollutant compliance demonstration has been submitted and approved with a limitation that AEC-1, AEC-2, AEC-3, and AEC-4 combined shall combust no more than 68,500 gallons of diesel fuel per consecutive 12-month period. The compliance demonstration is detailed in the table below.

		Compliance Demonstration Method	
Evaluated Toxic Air Pollutant	CAS No.	Actual Emission Rate Below Toxics Permitting Emission Rate (TPER)?	Air Dispersion Modeling Conducted?
Acetaldehyde	75-07-0	Yes	No
Acrolein	107-02-8	Yes	No
Benzene	71-43-2	Yes	No
Benzo(a)pyrene	50-32-8	Yes	No
Formaldehyde	50-00-0	Yes	No
Hexane, n-	110-54-3	Yes	No
Manganese	7439-96-5	Yes	No
Nickel	7440-02-0	Yes	No
Toluene	108-88-3	Yes	No
Xylene	1330-20-7	Yes	No

The emission rates are below the TPERs and no air dispersion modeling is required.

#### (1) **Monitoring/Recordkeeping/Reporting** [WNCRAQA Code 17.0700]

The Permittee shall follow the monitoring, recordkeeping, and reporting requirements found in

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2.1(B)(3), 2.1(B)(4), and 2.1(B)(5) such that the total amount (gallons) of diesel fuel combusted by AEC-1, AEC-2, AEC-3, and AEC-4 does not exceed the limit in 2.7(C) above.

#### SECTION 3 - 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

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permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

#### (F) <u>Circumvention</u> - 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

- 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:

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- (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) <u>Reporting Requirements for Excess Emissions and Permit Deviations</u> [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.)

"<u>Deviations</u>" - 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

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excess emissions in accordance with WNCRAQA Code 4.0535 as follows:

- (a) Pursuant to WNCRAQA Code 4.0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
  - (i) Notify the Director of any such occurrence by 9:00 a.m. Eastern Time of the Agency's next business day of becoming aware of the occurrence and provide:
    - Name and location of the facility;
    - Nature and cause of the malfunction or breakdown:
    - Time when the malfunction or breakdown is first observed;
    - Expected duration; and
    - Estimated rate of emissions;
  - (ii) Notify the Director immediately when corrective measures have been accomplished; and
  - (iii) Submit to the Director within 15 days a written report as described in WNCRAQA Code 4.0535(f)(3);

#### Permit Deviations

- (3) Pursuant to WNCRAQA Code 17.0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - (a) Notify the Director of all other deviations from permit requirements not covered under WNCRAQA Code 4.0535 quarterly. A written report to the Director shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

#### (I.B) Other Requirements under WNCRAQA Code 4.0535

The Permittee shall comply with all other applicable requirements contained in WNCRAQA Code 4.0535, including 4.0535(c), as follows:

- (1) Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in WNCRAQA Code 4.0535(c)(1) through (7).
- (2) WNCRAQA Code 4.0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

#### (J) **Emergency Provisions** [40 CFR 70.6(g)]

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

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

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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) <u>Need to Halt or Reduce Activity Not a Defense</u> [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) <u>Duty to Provide Information (submittal of information)</u> [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

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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) <u>Certification by Responsible Official</u> [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

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- (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:

- 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

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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) <u>Standard Application Form and Required Information</u> [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) <u>Financial Responsibility and Compliance History</u> [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) <u>Refrigerant Requirements (Stratospheric Ozone and Climate Protection)</u> [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

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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) <u>Prevention of Accidental Releases "General Duty" Clause - Section 112(r)(1)</u> - 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) <u>Title IV Allowances</u> [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

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- 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

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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) <u>Fugitive Dust Control Requirement</u> [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) <u>Third Party Participation and EPA Review</u> [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 1

### LIST OF INSIGNIFICANT ACTIVITIES

The following sources are subject to locally enforceable rules and regulations:

AGS-1 - AGS-8	Eight (8) natural gas-fired turbocharger test cells: AGS-1 utilizes one (1) 1.846 million BTU per hour burner; AGS-2, AGS-6, and AGS-7 utilize one (1) 2.417 million BTU per hour burner; AGS-3 utilizes one (1) 3.222 million BTU per hour burner; AGS-4 and AGS-5 utilize (1) 3.625 million BTU per hour burner; and AGS-8 utilizes one (1) 3.801 million BTU per hour burner
ES-111	One (1) 6,000-gallon aboveground diesel storage tank
ES-113	One (1) Shaft and Wheel Washer utilizing a 1.03 million BTU per hour natural gas-fired burner on each unit
ES-118	Various parts washers utilizing VOC and/or HAP-containing cleaners
ES-119	One (1) Landa Pressure Washer utilizing one (1) 0.95 million BTU per hour natural gas-fired burner
ES-121	One (1) 250-gallon aboveground diesel storage tank
ES-123	One (1) QA/QC Laboratory
ES-124	One (1) boiler utilizing a 1.999 million BTU per hour natural gas-fired burner

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#### **ATTACHMENT 2**

#### 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 CO Carbon Monoxide

**COMS** Continuous Opacity Monitoring System

CFR Code of Federal Regulations
EPA Environmental Protection Agency

**FR** Federal Register

**GACT** Generally Available Control Technology

**HAP** Hazardous Air Pollutant

MACT Maximum Achievable Control Technology

**NCGS** North Carolina General Statutes

**NESHAPs** National Emission Standards for Hazardous Air Pollutants

NMHC Non-methane Hydrocarbons

**NO**<sub>X</sub> Nitrogen Oxides

**NSPS** New Source Performance Standard

**PM** Particulate Matter

PM<sub>10</sub> Particulate Matter with Nominal Aerodynamic Diameter of 10

Micrometers or Less

PM<sub>2.5</sub> Particulate Matter with Nominal Aerodynamic Diameter of 2.5

Micrometers or Less

**POS** Primary Operating Scenario

PSD Prevention of Significant Deterioration
RICE Reciprocating Internal Combustion Engine

**SI** Spark Ignition

SIC Standard Industrial Classification

**SIP** State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide TPY Tons Per Year

**VOC** Volatile Organic Compound

WNCRAQA Western North Carolina Regional Air Quality Agency