PERMIT NO. 7374-113-0073-S-01-0
ISSUANCE DATE: 10/11/2023

GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality Permit

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to and in effect under that Act,

Facility Name:	**QTS Fayetteville I, LLC**
Facility Address:	**1435 Hwy 54 West** **Fayetteville, Georgia 30214, Fayette County**
Mailing Address:	**6431 Longhorn Dr** **Irving, Texas 75063**
Facility AIRS Number:	**04-13-113-00073**

is issued a Permit for the following:

The construction and operation of a new data center with 205 diesel-fired emergency generators and one diesel-fired fire pump. This Permit is issued for the purpose of establishing practically enforceable emission limitations such that the facility will not be considered a major source with respect to Title V of the Clean Air Act Amendments of 1990.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 28934 dated June 26, 2023; any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **8** pages.

STATE OF GEORGIA
CONSTITUTION
WISDOM
JUSTICE
MODERATION
1776

Jeffrey W. Cown

Jeffrey W. Cown, Interim Director
Environmental Protection Division

1. General Requirements

1.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate this source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection or surveillance of the source.

1.2 The Permittee shall not build, erect, install or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged into the atmosphere.

1.3 The Permittee shall submit a Georgia Air Quality Permit application to the Division prior to the commencement of any modification, as defined in 391-3-1-.01(pp), which may result in air pollution and which is not exempt under 391-3-1-.03(6). Such application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. The application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity and pollutant emission rates of the plant before and after the change, and the anticipated completion date of the change.

1.4 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and shall be retained for at least five (5) years following the date of entry.

1.5 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.

2. Allowable Emissions

2.1 The Permittee shall not cause, let, suffer, permit, or allow the total consumption of diesel fuel to exceed 670,000 gallons during any 12 consecutive month period in emergency generators (Source Code: EG001 through EG205) and fire pump (Source Code: FP001).
[Avoidance of Part 70]

2.2 The Permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A – "General Provisions" and Subpart IIII – "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" for the operation of the emergency generators (Source Codes: EG001 through EG205).
[40 CFR 60 Subpart A and Subpart IIII]

2.3 The Permittee shall not discharge or cause the discharge into the atmosphere from the diesel-fired emergency generators defined in Condition 2.2 emissions of non-methane hydrocarbons and nitrogen oxides (NMHC+NO_X), hydrocarbons (HC), nitrogen oxides (NO_X), carbon monoxide (CO), and particulate matter (PM) in an amount exceeding the emissions standards specified in 40 CFR 60.42.05(b), as indicated in Table 2.3-1:
[40 CFR 60.4205(b), 40 CFR 60.4202(b)(2), and 40 CFR 1039, Appendix I(b)]

Table 2.3-1: NSPS 40 CFR Part 60. Subpart IIII Emission Standards For all Stationary 2007 and later Model Year Diesel Engines With A Displacement Of Less Than 10 Liters Per Cylinder And Maximum Engine Power Of Larger Than 560 kW, with emission limits in terms of g/kW-hr (lb/HP-hr)

Pollutant	NO_x + NMHC	CO	PM
Emission Limit	6.4 (0.0105)	3.5 (0.00575)	0.20 ($3.29x10^{-4}$)

2.4 The Permittee shall not discharge into or cause the discharge into the atmosphere from the emergency generators defined in Condition 2.2, any visible emission the opacity of which is equal to or greater than 20 percent during the acceleration mode, 15 percent during the lugging mode, and 50 percent during the peaks in either the acceleration or lugging modes per 40 CFR 1039.105.
[40 CFR 60.4202(a)(2), 40 CFR 60.4205(b), and 40 CFR 1039.105(b)]

2.5 The Permittee shall use diesel fuel with a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent in the emergency generators (Source Code: EG001 through EG205).
[40 CFR 60.4207, 40 CFR 1090.306, and 391-3-1-.02(2)(g) (subsumed)]

2.6 The Permittee shall comply with the emission standards in Condition 2.3 and 2.4 by purchasing an engine certified to the emission standards for the model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications.
[40 CFR 60.4211(c) and 391-3-1-.02(2)(yy)]

2.7 The Permittee must operate the emergency stationary internal combustion engines according to the requirements in paragraphs (f)(1) through (3) of 40 CFR 60.421. In order for the engine to be considered an emergency stationary internal combustion engine, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of 40 CFR 60.4211, is prohibited. If the Permittee does not operate the engine according to the requirements in paragraphs (f)(1) through (3), the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines:
[40 CFR 60.4211(f)]

a. No time limit on the use of the emergency generators in emergency situations.

b. The emergency generators may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year. The Permittee may petition the Division 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.

c. The emergency generators may be operated for a maximum of 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 specified in Paragraph b. Except as provided in Condition 2.7.c.i, the 50 hours per calendar 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.

i. 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.

(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 engine owner or operator.

2.8 The Permittee shall limit the operation of the emergency generators (Source Codes: EG001 through EG205) to the following criteria:
[391-3-1-.02(2)(mmm)8]

a. Operate only for routine testing and maintenance, when electric power for the local utility is not available, or during internal system failures;

b. Total annual operation for each generator is less than 500 hours per year;

c. The Permittee shall limit the operation for routine testing and maintenance during the months of May through September to the hours between 10 p.m. and 4 a.m. Operation for routine testing and maintenance during the months of January through April and October through December may be done during any time of day; and

d. The facility maintains records of all operation, including the reason for the operation.

For each emergency generator that cannot meet the definition of "Emergency standby stationary engine" found in Georgia Rule 391-3-1-.02(2)(mmm)8 for data centers, the Permittee shall not discharge, or cause the discharge, into the atmosphere, from each engine, any gases which contain nitrogen oxides (NOx) in excess of 80 ppm at 15% oxygen, dry basis during the ozone season. For purposes of this permit, the ozone season is defined as the time period beginning May 1 and ending September 30.

2.9 The Permittee shall comply with all applicable requirements of 40 CFR 63 Subpart A – "General Provisions" and Subpart ZZZZ – "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" for the operation of the emergency generators (Source Code: EG001 through EG205).
[40 CFR 63 Subpart A and Subpart ZZZZ]

2.10 The Permittee shall not discharge or cause discharge into the atmosphere from the emergency generators (Source Code: EG001 through EG205) any gases which exhibit opacity equal to or greater than 40 percent.
[391-3-1-.02(2)(b)]

2.11 Fuel oil fired in the emergency generators shall be diesel fuel oil. Distillate fuel oil means fuel oil that complies with the specifications for fuel oil number 1 or 2, as defined by the American Society for Testing and Materials (ASTM) standard ASTM D396, "Standard Specification for Fuel Oils."
[391-3-1-.03(2)(c)]

3. Fugitive Emissions

3.1 The Permittee shall take all reasonable precautions to prevent fugitive dust from becoming airborne from any operation, process, handling, and transportation or storage facility. The opacity from any fugitive dust source shall not equal or exceed twenty percent. Reasonable precautions that should be taken to prevent dust from becoming airborne include, but are not limited to, the following:
[391-3-1-.02(2)(n)]

a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

b. Application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dusts;

c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

d. Covering, at all times when in motion, open-bodied trucks, transporting materials likely to give rise to airborne dust; and

e. The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited.

4. Process & Control Equipment

4.1 Each emergency generator that achieves the emission standards required in Conditions 2.3 and 2.4 shall be operated and maintained according to the manufacturer's written specifications/instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of each engine.
[40 CFR 60.4211(a) and 40 CFR 60.4206]

5. Monitoring

5.1 The Permittee shall install, calibrate, maintain, and operate a non-resettable continuous monitoring system (or device) for each emergency generator (Source Code: EG001 through EG205) to monitor and record the hours operated during emergency service, to monitor and record the hours of operation in non-emergency service (maintenance and/or testing), and to monitor and record the cumulative total hours of operation. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 60.4209(a)]

5.2 The Permittee shall verify that each shipment of diesel fuel oil received for combustion in each emergency generator is distillate oil, No. 2 fuel oil, No. 2 diesel fuel oil or very low sulfur diesel fuel oil and that the oil complies with the requirements of Condition 2.11. Verification shall consist of either of the following:

a. Fuel oil receipts obtained from the fuel supplier certifying that the oil is distillate oil, No. 2 fuel oil, No. 2 diesel fuel oil or very low sulfur diesel fuel oil. Fuel supplier certification shall include the following information; (1) the name of the oil supplier and (2) a statement from the oil supplier that the oil complies with the specifications under the definition of distillate fuel oil or

b. Analysis of the fuel oil conducted by methods sampling and analysis, which have been specified or approved by the Division.

6. Performance Testing

6.1 The Permittee shall cause to be conducted a performance test at any specified emission point when so directed by the Division. The following provisions shall apply with regard to such tests:

a. All tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants.

b. All test results shall be submitted to the Division within sixty (60) days of the completion of testing.

c. The Permittee shall provide the Division thirty (30) days prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.

d. All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.

7. Notification, Reporting and Record Keeping Requirements

7.1 The Permittee shall submit written notification of startup to the Division within 15 days after such date. The notification shall be submitted to:
Mr. Sean Taylor
Stationary Source Compliance Program
4244 International Parkway, Suite 120
Atlanta GA 30354

7.2 The Permittee shall keep records of the following for the emergency generators (Source Code: EG001 through EG205).
[40 CFR 60.4211(a) and 40 CFR 60.4211(c)]

a. Documentation from the engine manufacturer that the engine is certified to meet the emission standards of 40 CFR 60 Subpart IIII. The engine manufacturer certifications shall be kept for the life of the engine.

b. Copy of the manufacturer's written operating and maintenance instructions or operating and maintenance procedures developed by the Permittee that are approved by the engine manufacturer.

Records shall be maintained for a period of five (5) years in a format suitable for inspection by or submission to the Division.

7.3 The Permittee shall keep records verifying that each shipment of diesel fuel received for firing in each emergency generator complies with the applicable requirements in Condition 2.5. Verification shall consist of either the fuel oil receipts and/or fuel supplier certifications or results of analyses of the fuel oils conducted by methods of sampling and analysis which have been specified or approved by the EPA or the Division.

7.4 The Permittee shall retain monthly records of all fuel burned in the emergency generators at the facility for five years after the date and year of record. The records shall be available for inspection or submittal to the Division, upon request, and contain the fuel supplier certifications or fuel oil analyses required by Condition 7.3.
[Avoidance of 40 CFR Part 70]

7.5 The Permittee shall not be required to submit an initial notification for each emergency generator. The Permittee shall record and maintain monthly operating records for each emergency generator using the non-resettable hour meter as required by Condition 5.1, including records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter, readiness testing and/or maintenance check. Records 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, 40 CFR 60.4214(b), and Table 5 of Subpart IIII]

7.6 If the Permittee operates the emergency generators as specified in Condition 2.7.c.i. the Permittee shall submit an annual report according to the following requirements:
[391-3-1-.02(6)(b)1 and 40 CFR 60.4214(d)]

a. The report must contain the following information:

i. Company name and address where the engine is located.

ii. Date of the report and beginning and ending dates of the reporting period.

iii. Engine site rating and model year.

iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

v. Hours operated for the purposes specified in Condition 2.7.c., including the date, start time, and end time for engine operation for the purposes specified in Condition 2.7.c. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

vi. If there were no deviations from the fuel requirements in Conditions 2.5 and 2.11 that apply to the engine, a statement that there were no deviations from the fuel requirements during the reporting period

vii. If there were deviations from the fuel requirements in Conditions 2.5 and 2.11 that apply to the engine, information on the number, duration, and cause of deviations, and the corrective action taken.

b. The annual reports must be submitted no later than March 31 of the following calendar year of record.

c. The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Division.

8. Special Conditions

8.1 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.

8.2 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of the fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Application & Annual Permit Fees."