PERMIT NO. 7374-097-0098-S-01-0
ISSUANCE DATE: 02/19/2024

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: **Aligned Data Centers ATL01**

Facility Address: **1551 North River Road**
Douglasville, Georgia 30122 Douglas County

Mailing Address: **2800 Summit Avenue**
Plano, TX 75074

Facility AIRS Number: **04-13-097-00098**

is issued a Permit for the following:

Construction and operation of a data center including the installation of 49 diesel fired emergency generators with integrated diesel belly tanks. 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. 29094 dated November 13, 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, 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 discharge, or cause the discharge, into the atmosphere, from emergency generators (Source IDs: EG01-EG49), any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent, unless otherwise specified.
[391-3-1-.02(2)(b)1]

2.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility nitrogen oxides (NOx) emissions equal to or greater than **99.9** tons during any twelve consecutive month period.
[Avoidance of 40 CFR Part 70]

2.3 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility carbon monoxide (CO) emissions equal to or greater than **99.9** tons during any twelve consecutive month period.
[Avoidance of 40 CFR Part 70]

2.4 The Permittee shall operate the emergency generators (Source IDs: EG01-EG49) according to the requirements specified below. Any operation other than emergency operation, maintenance check and readiness testing, as described below, is prohibited:
[40 CFR 63.6640(f) and 40 CFR 60.4211(f)]

a. 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 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.

b. 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 a. Except as provided in Condition 2.4.b.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.

2.5 The Permittee shall fuel the emergency generators (Source IDs: EG01-EG49) with diesel fuel oil that has a maximum sulfur content of 15 ppm (0.0015% by weight) and either a minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
[40 CFR 60.4207 and 391-3-1-.02(2)(g) subsumed]

2.6 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)]

2.7 The Permittee shall limit the total annual hours of operation of each emergency generator to not equal or exceed 500 hours per generator during any twelve consecutive months.
[391-3-1-.03(2)(c) and 391-3-1-.02(mmm)8]

2.8 The Permittee shall comply with all applicable provision of 40 CFR 63, Subpart A, “General Provisions” and 40 CFR 63, Subpart ZZZZ, “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [RICE]” for operation of the emergency generators (Source IDs: EG01-EG49) by complying with 40 CFR 60 Subpart IIII.
[40 CFR 63 Subparts A and ZZZZ]

2.9 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) as found in 40 CFR 60 Subpart A - "General Provisions" and 40 CFR 60 Subpart IIII - " Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," for operation of emergency generators (Source IDs: EG01-EG49).
[40 CFR 60 Subparts A and IIII, 40 CFR 60.4200]

3. Fugitive Emissions

3.1 The Permittee shall take all reasonable precautions with any operation, process, handling, transportation, or storage facilities to prevent fugitive emissions of air contaminants.

4. Process & Control Equipment

4.1 The Permittee shall operate and maintain engines according to the manufacturer’s emission related written specifications/instructions or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine. In addition, the Permittee shall only change those emission-related settings that are permitted by the manufacturer.
[40 CFR 60.4211(a)]

5. Monitoring

5.1 The Permittee shall install, calibrate, maintain, and operate a system to monitor and record the indicated parameters on each emergency generator (Source IDs: EG01-EG49). Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1; 40 CFR 63.6625(f); 40 CFR 60.4209(a)]

a. A non-resettable hour meter to continuously record and track the hours operated during emergency service and the hours operated in non-emergency service (maintenance and/or testing).

b. A system to record the reason the engine was in operation during emergency and/or non-emergency service, and to record the cumulative total hours of operation.

5.2 The Permittee shall operate and maintain emergency generators (Source IDs: EG01-EG49), including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.
[40 CFR 63.6605(b)]

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 maintain monthly operating records for each emergency generator (Source IDs: EG01-EG49) in emergency and non-emergency service, as recorded on the non-resettable hour meter required for each generator in Condition 5.1. The Permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. Records shall be maintained for a period of five (5) years in a format suitable for inspection by or submission to the Division.
[391-3-1-.02(6)(b)1]

7.3 The Permittee shall use monthly operating time data required by Condition 7.2 to calculate monthly the twelve-month rolling total of operating time for each of the emergency generators (Source IDs: EG01-EG49) for each consecutive twelve-month period. All the calculations shall be kept as part of the records required in Condition 7.2. The Permittee shall notify the Division in writing within 15 days if the twelve-month rolling total operating time for any generator equals or exceeds 500 hours. This notification shall include an explanation of how the Permittee intends to comply with Condition 2.7.
[391-3-1-.02(6)(b)1]

7.4 The Permittee shall use monthly non-emergency service operating time records required by Condition 7.2 to calculate monthly the twelve-month rolling total of the non-emergency service operating time for the generators (Source IDs: EG01-EG49) for each consecutive twelve-month period. All the calculations shall be kept as part of the records required in Condition 7.2. The Permittee shall notify the Division in writing within 15 days if the twelve-month rolling total of non-emergency service operating time for any generator (Source IDs: EG01-EG49) equals or exceeds 100 hours. This notification shall include an explanation of how the Permittee intends to comply with Condition 2.4.
[40 CFR 60.4211(f)(3)]

7.5 The Permittee shall use the operating time records required in Condition 7.2 and the most updated EPA- or Division-approved NOx emission factors to calculate the monthly total NOx emissions from the emergency generators (Source IDs: EG01-EG49). All demonstration calculations, including the EPA or Division-approved emission factors used in the calculations, shall be kept as part of the records required in Condition 7.2. The Permittee shall notify the Division in writing within 15 days if the monthly total NOx emissions equal or exceed **8.33** tons during any calendar month. This notification shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 2.2. Monthly NOx emissions from fuel combustion shall be determined by the following equation:
[391-3-1-.02(6)(b)1 and 40 CFR 70 Avoidance]

$$E_{NOx} = \sum_{i=1}^{n}\left[\frac{(T_i)(W_i)(P_i)}{(453.6)(2000)}\right]$$

Where:

E_{NOx} = Monthly total NOx emissions from all engines in the facility, ton;

$\sum$ = Summation of items inside the bracket, dimensionless;

n = Total number of the engines operated during the month, dimensionless;
i = i^{th} engine operated in the month, dimensionless;
T_i = Total operating time of the i^{th} engine during the month, hour;
W_i = Capacity of the i^{th} engine when operated during the month, bhp;
453.6 = Conversion Factor from gram to pound;
2000 = Conversion factor from pound to ton;
P_i = NOx emission factor of the i^{th} engine when operated at the capacity of W_i, g/bhp-hr.
For the purpose of this permit, the emission factors are as follows:

Source ID	Description	Emission factor (P_i) [g/bhp-hr]
EG01	Cat® C32	6.09
EG02-EG49	Cat® C175-16 (Operating Scenario 1) Cat® 3516E (Operating Scenario 2)	6.07 5.63

7.6 The Permittee shall use the operating time records required in Condition 7.2 and the most updated EPA- or Division-approved CO emission factors to calculate the monthly total CO emissions from the emergency generators (Source IDs: EG01-EG49). All demonstration calculations, including the EPA or Division-approved emission factors used in the calculations, shall be kept as part of the records required in Condition 7.2. The Permittee shall notify the Division in writing within 15 days if the monthly total CO emissions equal or exceed **8.33** tons during any calendar month. This notification shall include an explanation of how the Permittee intends to maintain compliance with the emission limit in Condition 2.3. Monthly CO emissions from fuel combustion shall be determined by the following equation:
[391-3-1-.02(6)(b)1 and 40 CFR 70 Avoidance]

$$E_{CO} = \sum_{i=1}^{n}\left[\frac{(T_i)(W_i)(P_i)}{(453.6)(2000)}\right]$$

Where:

E_{CO} = Monthly total CO emissions from all engines in the facility, ton;

$\sum$ = Summation of items inside the bracket, dimensionless;

n = Total number of the engines operated during the month, dimensionless;
i = i^{th} engine operated in the month, dimensionless;
T_i = Total operating time of the i^{th} engine during the month, hour;

W_i = Capacity of the i^{th} engine when operated during the month, bhp;
453.6 = Conversion Factor from gram to pound;
2000 = Conversion factor from pound to ton;
P_i = NOx emission factor of the i^{th} engine when operated at the capacity of W_i, g/bhp-hr.
For the purpose of this permit, the emission factors are as follows:

Source ID	Description	Emission factor (P_i) [g/bhp-hr]
EG01	Cat® C32	0.18
EG02-EG49	Cat® C175-16 (Operating Scenario 1) Cat® 3516E (Operating Scenario 2)	0.34 0.66

7.7 The Permittee shall use the monthly records required in Condition 7.5 to calculate the twelve-month rolling total of NO_x emissions from generators (Source IDs: EG01-EG49) for each calendar month. All the calculations shall be kept as part of the records required in Condition 7.2. The Permittee shall notify the Division in writing within 15 days if any of the twelve-month rolling totals of the NO_x emissions equal or exceed **99.9** tons.
[Avoidance of 40 CFR Part 70]

7.8 The Permittee shall use the monthly records required in Condition 7.6 to calculate the twelve-month rolling total of CO emissions from generators (Source IDs: EG01-EG49) for each calendar month. All the calculations shall be kept as part of the records required in Condition 7.2. The Permittee shall notify the Division in writing within 15 days if any of the twelve-month rolling totals of the CO emissions equal or exceed **99.9** tons.
[Avoidance of 40 CFR Part 70]

7.9 The Permittee shall demonstrate compliance with emission standards specified in 40 CFR 60, Subpart IIII for emergency generators (Source IDs: EG01-EG49) by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 60.4211(c)]

7.10 The Permittee shall maintain a 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 for the generators (Source IDs: EG01-EG49). These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 60.4211(a)]

7.11 The Permittee shall keep records verifying that each shipment of diesel fuel oil received for firing the generators at the facility complies with the applicable requirements in Conditions 2.5 and 2.6. Verification shall consist of 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. These records shall be kept available for inspection or submittal for five (5) years from the date of record.
[391-3-1-.02(6)(b)1]

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."