PERMIT AMENDMENT NO. 7375-097-0091-S-01-2
ISSUANCE DATE: 01/31/2022

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Air Quality – Permit Amendment

In accordance with 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 or in effect under that Act, Permit No. 7375-097-0091-S-01-0 issued on February 9, 2018 to:

Facility Name:	**The Keep Campus**
Facility Address:	**580 Douglas Hills Road,** **Lithia Springs, Georgia 30168 Douglas County**
Mailing Address:	**P.O. Box 400850** **Las Vegas, NV 89140**
Facility AIRS Number:	**04-13-097-00091**

for the following: Construction and operation of a data center with emergency standby stationary generators for back-up power to the campus.

is hereby amended as follows: Construction and operation of additional Diesel-Fired Emergency Generators to provide back-up power to the campus.

Reason for Amendment: Application No. 28159 signed October 21, 2021.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **3** page(s).

This Permit Amendment is hereby made a part of Permit No. 7375-097-0091-S-01-0 and compliance herewith is hereby ordered. Except as amended hereby, the above referenced Permit remains in full force and effect.

Richard E. Dunn, Director
Environmental Protection Division

2. Allowable Emissions

Modified Condition

2.1 The Permittee shall not discharge or cause the discharge into the atmosphere from data center operations nitrogen oxides (NOx) emissions equal to or greater than **100 tons** during any consecutive twelve-month period.
[Avoidance of NAA/NSR]

7. Notification, Reporting and Recordkeeping Requirements

Modified Conditions

7.6 The Permittee shall use the operational data (hours and load, if needed) measured and recorded per Conditions 5.2 and 7.1 and Division approved emission rates to calculate monthly NOx emissions, each calendar month, from all emergency generators and the Corporate Diesel-Fired Emergency Generator (Source Code: **CGEN**). The Permittee shall use the higher of the Manufacture's Emission Rates in the table below or the NOx emission rates determined from the performance testing required by Condition 6.2. All demonstration calculations shall be kept as part of the records required by Condition 7.1. The Permittee shall notify the Division in writing within 15 days if the monthly total NOx emissions from the facility equals or exceeds **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 2.1. Monthly NOx emissions from fuel combustion at the facility shall be determined using the following equation:

a. Monthly NOx Emissions:

$$NOx\ (tons) = \sum_{n=1}^{x} \left[Emission\ Rate\ @\ 100\%\ Load\ L\text{n}\ \left(\frac{lbs}{hr}\right)\right][Hrs\text{n}]/2000$$

Where:

Emission Rate @ 100% Load L_n = The mass emission rate in pounds per hour for engine *n* at 100% operating load (The higher of the Manufacture's Emission Rate **44.35 lbs/hr** or the NOx emission rate determined from performance testing required by Condition 6.2 for the emergency generators except the Corporate Diesel-Fired Emergency Generator (Source Code: CGEN), and the higher of the Manufacture's Emission Rate 9.05 lbs/hr or the NOx emission rate determined from performance testing required by Condition 6.2 for the Corporate Diesel-Fired Emergency Generator (Source Code: CGEN)).

Hrs = the total operating hours for engine *n* in the given calendar month.

n = generator number

x = actual number of generators in operation

or as an alternative:

b. The Permittee shall use the operational data (hours and load) measured and recorded per Conditions 5.2 and 7.1 and calculate monthly NOx emissions, each calendar month, from all emergency generators and the Corporate Diesel-Fired Emergency Generator (Source Code: CGEN). All demonstration calculations shall be kept as part of the records required by Condition 7.1. Monthly NOx emissions from fuel combustion at the facility shall be determined using the following equation:

Total Monthly NOx Emissions (tons/month):

$$= \sum_{i=0\%}^{100\%} \left[Emission\ Rate\ at\ Load_i \left(\frac{lb}{hr}\right) X\ Hours\ at\ Load_i \left(\frac{hrs}{month}\right) \right] \div \left(2{,}000\ \frac{lb}{ton}\right)$$

Where:

i = the next highest engine load from the average load over one-hour measured during the run (10%, 25%, 50%, 75%, and 100%).

Emission Rate at Load = the NOx mass emission rate in pounds per hour for load$_i$. For hours where the average recorded load is at 10%, 25%, 50%, 75% or 100% load, the *Emission Rate at Load*$_i$ will be equal to the higher of the corresponding emission rate in the table below or the emission rate determined from performance testing. For runs where the maximum recorded load is at other loads, the *Emission Rate at Load*$_i$ will be equal to the higher of the emission rate listed in the table below or the emission rate determined from performance testing that corresponds to the next highest load.

Hours at Load = total facility wide operating hours at a given calculated load for the given calendar month.

Emission Rate @ Load for all emergency generators except the Corporate Diesel-Fired Emergency Generator:

Average Load	10%	25%	50%	75%	100%
Manufacture's Emission Rate (lbs/hr)	5.14	6.83	16.30	30.32	44.35

Emission Rate @ Load for the Corporate Diesel-Fired Emergency Generator (Source Code: CGEN)

Average Load	10%	25%	50%	75%	100%
Manufacture's Emission Rate (lbs/hr)	1.3	1.96	3.45	5.98	9.05

7.7 The Permittee shall use the monthly records required in Condition 7.6 to calculate the twelve-month rolling total of NOx emissions from the facility for each calendar month. All the calculations shall be kept as part of the records required in Condition 7.1. The Permittee shall notify the Division in writing within 15 days if any of the twelve-month rolling total of the NOx emissions equals or exceeds **100 tons**. This notification shall include an explanation of how the Permittee intends attain future compliance with the NOx emission limit in Condition 2.1. [391-3-1-.02(6)(b)1]