PERMIT AMENDMENT NO. 7374-217-0072-S-01-2
ISSUANCE DATE: 10/17/2019

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. 7374-217-0072-S-01-0 issued on December 14, 2017 to:

Facility Name:	**Morning Hornet, LLC**
Facility Address:	**South of Highway 278 NE and Shire Parkway and North of Cooper Road, Social Circle, Georgia 30025 Newton County**
Mailing Address:	**1 Hacker Way** **Menlo Park, California 94025**
Facility AIRS Number:	**04-13-217-0072**

for the following: The operation of a planned data center to supply power during readiness testing, system maintenance and emergencies

is hereby amended as follows: Removal of twenty-two [22] diesel-fired emergency generators and the revision of model specifications for fourteen [14] previously permitted emergency generators.

Reason for Amendment: Application No. 27205 dated August 26, 2019, and addendum received September 23, 2019.

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. 7374-217-0072-S-01-0 and compliance herewith is hereby ordered. Except as amended hereby, the above referenced Permit remains in full force and effect.

STATE OF GEORGIA
CONSTITUTION
WISDOM
JUSTICE
MODERATION
1776

[Signed]

Richard E. Dunn, Director
Environmental Protection Division

7. Notification, Reporting and Record Keeping Requirements

Modified Condition

7.6 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 (Group 1, Group 2, and Group 3). 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)

$$= \sum_{i=0\%}^{100\%} \left[\frac{Group\ 1\ Generator\ NO_X\ Emission\ Rate\ at\ Load_i \left(\frac{lb}{hr}\right)}{X\ Monthly\ Hours\ of\ Operation\ for\ all\ Group\ 1\ Generators\ at\ Load_i \left(\frac{hrs}{month}\right)} \right] \div \left(2{,}000 \frac{lb}{ton}\right)$$

$$+ \sum_{i=0\%}^{100\%} \left[\frac{Group\ 2\ Generator\ NO_X\ Emission\ Rate\ at\ Load_i \left(\frac{lb}{hr}\right)}{X\ Monthly\ Hours\ of\ Operation\ for\ all\ Group\ 2\ Generators\ at\ Load_i \left(\frac{hrs}{month}\right)} \right] \div \left(2{,}000 \frac{lb}{ton}\right)$$

$$+ \sum_{i=0\%}^{100\%} \left[\frac{\boldsymbol{Group\ 3\ Generator\ NO_X\ Emission\ Rate\ at\ Load_i \left(\frac{lb}{hr}\right)}}{\boldsymbol{X\ Monthly\ Hours\ of\ Operation\ for\ all\ Group\ 3\ Generators\ at\ Load_i \left(\frac{hrs}{month}\right)}} \right] \div \left(\boldsymbol{2{,}000 \frac{lb}{ton}}\right)$$

Where:

i = the engine load 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 runs where the maximum recorded load is at 10%, 25%, 50%, 75% or 100% load, the *Emission Rate at Load$_i$* will be equal to the corresponding emission rate in the table below. For runs where the maximum recorded load is at other loads, the *Emission Rate at Load$_i$* will be equal to the emission rate listed in the table below 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.

Hourly Emission Rate @ Load for engines (Group 1) with power output of 28.4 MMBtu/hr:

Average Load	10%	25%	50%	75%	100%
Emission Rate (lbs/hr)	11.00	11.92	23.08	40.40	66.94

Hourly Emission Rate @ Load for engines (Group 2) with power output of 10.0 MMBtu/hr:

Average Load	10%	25%	50%	75%	100%
Emission Rate (lbs/hr)	6.20	6.20	10.89	15.43	30.42

Hourly Emission Rate @ Load for engines (Group 3) with power output of 29.2 MMBtu/hr:

Average Load	**10%**	**25%**	**50%**	**75%**	**100%**
Emission Rate (lbs/hr)	**7.37**	**8.38**	**20.78**	**47.61**	**71.09**