PERMIT AMENDMENT NO. 7376-121-0969-S-01-1
ISSUANCE DATE: 11/27/2024

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. 7376-121-0969-S-01-0 issued on November 30, 2022 to:

Facility Name:	**Microsoft Corporation – ATL06 Facility**
Facility Address:	**4615 Ben Hill Road** **East Point, Georgia 30349 Fulton County**
Mailing Address:	**I Microsoft Way** **Redmond, WA 98052**
Facility AIRS Number:	**04-13-121-00969**

for the following: Installation and construction of twenty [20] 3,000-kW emergency generators and one [1] 500-kW emergency generator at building 1 to provide backup power to servers and other electronic equipment in the event of a power outage (GN1 through GN21).

is hereby amended as follows: Installation and operation of an additional twenty [20] 3,000-kW generators and one [1] 500-kW generator to provide backup power to the building 2 expansion of ATL06 Facility (GN22 through GN42.

Reason for Amendment: Application No. 29402 was dated August 14, 2024, and received August 16, 2024.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached 7 page(s).

This Permit Amendment is hereby made a part of Permit No. 7376-121-0969-S-01-0 and compliance herewith is hereby ordered. Except as amended hereby, the above referenced Permit remains in full force and effect.

Jeffrey W. Cown

Jeffrey W. Cown, Director
Environmental Protection Division

2. Allowable Emissions

[Modified Conditions]

2.1 The Permittee shall not discharge into or cause the discharge into the atmosphere from emergency generator **(Source IDs: GN1-GN42) any visible emissions 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. [40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), 40 CFR 60.4202(b)(2), 40 CFR 1039.105(b), and** 391-3-1-.02(2)(b)1 **subsumed]**
[391-3-1-.02(2)(b)1]

2.3 **The Permittee must operate the emergency generators (Source IDs: GN1-GN42) according to the following requirements of 40 CFR 60.4211 and 40 CFR 63.6640. In order for the engine to be considered an emergency stationary internal combustion engine under this subpart, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described below is prohibited. If the Permittee does not operate the engine according to the requirements below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines:**
[40 CFR 63.6640(f) and 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 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.

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 2.4.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.

2.4 The Permittee shall fuel the emergency generators (**Source IDs: GN1-GN42**) with diesel fuel oil **or renewable 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]

2.5 The Permittee shall limit the operation of each emergency generator (**Source IDs: GN1-GN42**) 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. Operation for routine testing and maintenance during the months of May through September occurs only between 10 p.m. and 4 a.m **local time**. 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.

2.6 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: GN1-GN42**) by complying with 40 CFR 60 Subpart IIII.
[40 CFR 63, Subparts A and ZZZZ]

2.7 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: GN1-GN42**). [40 CFR 60, Subparts A and IIII]

[New Condition]

2.8 Fuel oil fired in the emergency generators shall be diesel fuel oil or renewable diesel fuel oil. Distillate diesel 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 D975-24, "Standard Specification for Diesel Fuel." [391-3-1-.03(2)(c)]

5. Monitoring

[Modified Condition]

5.2 The Permittee shall operate and maintain emergency generators (**Source IDs: GN1-GN42**), 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. **The Permittee must monitor continuously at all times each emergency generator is operating, except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities.**

A monitoring malfunction is defined as any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not considered to be malfunctions. data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities may not be used in data averages and calculations used to report emission or operating levels. The Permittee must, however, use all the valid data collected during all other periods.
[40 CFR 63.6605(b) **and 40 CFR 63.6635(b) and (c)**]

[New Condition]

5.3 The Permittee shall verify that each shipment of diesel fuel oil received for combustion in each emergency generator (Source IDs: GN1-GN42) is distillate oil, No. 2 fuel oil, No. 2 diesel fuel oil, renewable diesel fuel oil, or very low sulfur diesel fuel oil and that the oil complies with the requirements of Condition 2.8. 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.

7. Notification, Reporting and Record Keeping Requirements

[Modified Conditions]

7.2 The Permittee shall maintain monthly operating records for each emergency generator (**Source IDs: GN1-GN42**) 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, **including readiness testing and/or maintenance checks,** and the reason the engine was in operation during that time. **Records shall be maintained in a format suitable for inspection by or submission to the Division for a period of five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record**.
[391-3-1-.02(6)(b)1, **40 CFR 63.6660, and 40 CFR 60.4214(b)**]

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: GN1-GN42**) 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 attain compliance with Condition 2.5.
[391-3-1-.02(6)(b)1 **and 391-3-1-.02(2)(mmm)8**]

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: GN1-GN42**) for each consecutive twelve-month period. 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 the twelve-month rolling total of non-emergency service operating time for any generator (**Source IDs: GN1-GN42**) equals or exceeds 100 hours. This notification shall include an explanation of how the Permittee intends to attain compliance with Condition 2.3.b.
[40 CFR 60.4211(f)(3)]

7.5 The Permittee shall use the operational data (**hours and load rate**) measured and recorded per Condition 7.2 and calculate monthly NOx emissions, each calendar month, from all emergency generators. All demonstration calculations shall be kept as a part of the records required by Condition 7.2. The Permittee shall notify the Division in writing within 15 days if the monthly total NOx emissions equal or exceed **8.25** 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 at the facility shall be determined using the following equation:
[391-3-1-.02(6)(b)1 and 40 CFR 70 Avoidance]

$$\textit{Monthly NOx Emissions}\left(\frac{tons}{month}\right) = \frac{\sum_{i=0\%}^{100\%} \textit{NOx Emission Rate at Load}\left(\frac{lb}{hr}\right) x\ \textit{Monthly Hours of Operation for all Generators at Load}\left(\frac{hrs}{month}\right)}{2{,}000\,\frac{lb}{ton}}$$

Where:
i = the engine load during the run

For runs at 10%, 25%, 50%, 75% or 100% load, the NOx Emission Rate at Load will be equal to the corresponding emission rate in the table below. For runs at other loads, the NOx Emission Rate at Load will be equal to the emission rate listed in the table below that corresponds to the next highest load. In the event that the Load Rate was not recorded, the NOx Emission Rate for 100% Load will be used.

Emission Rate @ Load:

Load Rate	*10%*	*25%*	*50%*	*75%*	*100%*
Emission Rate for 500-kW Generator (lb/hr)	**1.24**	**2.09**	**3.70**	**7.21**	**9.78**
Emission Rate for 3,000-kW Generators Using ULSD (lb/hr)	**6.88**	**10.88**	**19.56**	**37.25**	**60.90**

7.6 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: GN1-GN42)** 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 equals or exceeds **99** tons.
[Avoidance of 40 CFR Part 70]

7.7 The Permittee shall demonstrate compliance with emission standards specified in 40 CFR 60, Subpart IIII for emergency generators **(Source IDs: GN1-GN42)** 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) **and 40 CFR 60.4202(a)**]

7.8 The Permittee shall maintain a copy of the manufacturer's written operating and maintenance instructions, **including any** operating and maintenance procedures developed by the Permittee that are approved by the engine manufacturer for the generators **(Source IDs: GN1-GN42)**. These records shall be maintained in a format suitable for inspection or submittal.
[40 CFR 60.4211(a)]

7.9 The Permittee shall keep records verifying that each shipment of diesel fuel oil or renewable diesel fuel oil received for firing the emergency generators at the facility complies with the applicable requirements in **Conditions 2.4 and 2.8**. 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]

[New Condition]

7.10 If the Permittee operates emergency generators (Source IDs: GN1-GN42) as specified in Condition 2.3.c.i. the Permittee shall submit an annual report according to the requirements of 40 CFR 63.6650(h).
[40 CFR 60.4211(a), 40 CFR 63.6650(h), and 40 CFR 60.4214(d)]