



# 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:** Microsoft Corporation – CCO06 Facility

**Facility Address:** 0 Williams Road  
Palmetto, Georgia 30268 Fulton County

**Mailing Address:** 1 Microsoft Way  
Redmond, WA 98052

**Facility AIRS Number:** 04-13-121-00968

is issued a Permit for the following:

**Installation and construction of [116] 3,000-kW emergency generators and [5] 500-kW emergency generator to provide backup power in the event of a power outage in Buildings 1 through 5.**

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. 29582 dated January 31, 2025; 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.



*Jeffrey W. Cown*

Jeffrey W. Cown, Director  
Environmental Protection Division

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division**

**Permit No.  
7376-121-0968-E-02-0**

**Page 1 of 8**

**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 into or cause the discharge into the atmosphere from emergency generator (Source IDs: GN1-GN121) 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]
- 2.2 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire facility nitrogen oxides (NO<sub>x</sub>) emissions equal to or greater than **249** tons during any twelve consecutive month period.  
[Avoidance of 40 CFR 52.21]

**State of Georgia**  
**Department of Natural Resources**  
**Environmental Protection Division**

**Permit No.**

**Page 2 of 8**

**7376-121-0968-E-02-0**

2.3 The Permittee must operate the emergency generators (Source IDs: GN1-GN121) 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.

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division**

**Permit No.  
7376-121-0968-E-02-0**

**Page 3 of 8**

- (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-GN121) 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]
- 2.5 The Permittee shall limit the operation of the emergency generators (Source IDs: GN1-GN121) to the following criteria:  
[391-3-1-.02(2)(mmm)8 and 40 CFR 60.4211(f) subsumed]
- 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. 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 criteria for stationary engines at data centers found in Georgia Rule 391-3-1-.02(2)(mmm)8., the Permittee shall not discharge, or cause the discharge, into the atmosphere, from each engine, any gases which contain nitrogen oxides (NO<sub>x</sub>) 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.

- 2.6 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-GN121) by complying with 40 CFR 60 Subpart III.  
[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-GN121).  
[40 CFR 60, Subparts A and IIII]

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division**

**Permit No.  
7376-121-0968-E-02-0**

**Page 4 of 8**

- 2.8 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 D975-24, "Standard Specification for Diesel Fuel."  
[391-3-1-.03(2)(c)]

**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. 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), and 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: GN1-GN121), 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

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division**

**Permit No.**

**Page 5 of 8**

**7376-121-0968-E-02-0**

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)]

- 5.3 The Permittee shall verify that each shipment of diesel fuel oil received for combustion in each emergency generator (Source IDs: GN1-GN121) is distillate oil, No. 2 fuel oil, No. 2 diesel fuel oil or ultra-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.

**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.

**State of Georgia**  
**Department of Natural Resources**  
**Environmental Protection Division**

**Permit No.**  
**7376-121-0968-E-02-0**

**Page 6 of 8**

**7. Notification, Reporting and Record Keeping Requirements**

- 7.1 The Permittee shall maintain monthly operating records for each emergency generator (Source IDs: GN1-GN121) 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)]
- 7.2 The Permittee shall use monthly operating time data required by Condition 7.1 to calculate monthly the twelve-month rolling total of operating time for each of the emergency generators (Source IDs: GN1-GN121) 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 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]
- 7.3 The Permittee shall use monthly non-emergency service operating time records required by Condition 7.1 to calculate monthly the twelve-month rolling total of the non-emergency service operating time for the generators (Source IDs: GN1-GN121) for each consecutive twelve-month period. 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-GN121) equals or exceeds 100 hours. This notification shall include an explanation of how the Permittee intends to attain compliance with Condition 2.3.  
[40 CFR 60.4211(f)(3)]
- 7.4 The Permittee shall use the operational data (power and time) measured and recorded per Condition 7.1 and calculate monthly NO<sub>x</sub> emissions, each calendar month, from all emergency generators. All demonstration calculations shall be kept as a part of the records required by Condition 7.1. The Permittee shall notify the Division in writing within 15 days if the monthly total NO<sub>x</sub> emissions equal or exceed **20.75** 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 NO<sub>x</sub> emissions from fuel combustion at the facility shall be determined using the following equation:  
[391-3-1-.02(6)(b)1 and 40 CFR 52.21 Avoidance]

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division**

**Permit No.  
7376-121-0968-E-02-0**

**Page 7 of 8**

$$\text{Monthly NO}_x \text{ Emissions} \left( \frac{\text{tons}}{\text{month}} \right) = \frac{\sum_{i=0\%}^{100\%} \text{NO}_x \text{ Emission Rate at Load} \left( \frac{\text{lb}}{\text{hr}} \right) \times \text{Monthly Hours of Operation for all Generators at Load} \left( \frac{\text{hrs}}{\text{month}} \right)}{2,000 \frac{\text{lb}}{\text{ton}}}$$

Where:

*i* = the engine load during the run

For runs at 10%, 25%, 50%, 75% or 100% load, the NO<sub>x</sub> Emission Rate at Load will be equal to the corresponding emission rate in the table below. For runs at other loads, the NO<sub>x</sub> Emission Rate at Load will be equal to the emission rate listed in the table below that corresponds to the next highest load.

Emission Rate @ Load:

| <b>Load Rate</b>                                                | <b>10%</b> | <b>25%</b> | <b>50%</b> | <b>75%</b> | <b>100%</b> |
|-----------------------------------------------------------------|------------|------------|------------|------------|-------------|
| <b>Emission Rate for 500-kW Generator (lb/hr)</b>               | 1.23       | 2.07       | 3.68       | 7.15       | 9.71        |
| <b>Emission Rate for 3,000-kW Generators Using ULSD (lb/hr)</b> | 6.84       | 10.78      | 19.42      | 36.98      | 60.47       |

- 7.5 The Permittee shall use the monthly records required in Condition 7.4 to calculate the twelve-month rolling total of NO<sub>x</sub> emissions from generators (Source IDs: GN1-GN121) 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 totals of the NO<sub>x</sub> emissions equals or exceeds **249** tons.  
[Avoidance of 40 CFR 52.21]
- 7.6 The Permittee shall demonstrate compliance with emission standards specified in 40 CFR 60, Subpart IIII for emergency generators (Source IDs: GN1-GN121) 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)]
- 7.7 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

**State of Georgia  
Department of Natural Resources  
Environmental Protection Division**

**Permit No.**

**Page 8 of 8**

**7376-121-0968-E-02-0**

approved by the engine manufacturer for the generators (Source IDs: GN1-GN121). These records shall be maintained in a format suitable for inspection or submittal.  
[40 CFR 60.4211(a)]

7.8 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 2.4 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]

7.9 If the Permittee operates emergency generators (Source IDs: GN1-GN121) 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)]

**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."

8.3 Within twelve months of startup of the new emergency generators (Source Codes: GN39 through GN121), the Permittee is required to submit a complete application to the Division for a Part 70 (Title V) permit.  
[40 CFR 70.5(a)(1)(i)]

8.4 All Georgia Air Quality Permits previously issued to this facility, including Air Quality Permit No. 7376-121-0968-S-01-0 and its amendments are hereby revoked in their entirety.