

NARRATIVE

TO: Cynthia Dorrough
FROM: Renee Browne
DATE: November 25, 2025

Facility Name: **Equinix Atlanta Data Center**
AIRS No.: 04-13-151-00068
Location: Hampton, GA (Henry County)
Application #: 29899
Date of Application: October 3, 2025

Background Information

The Division received the Equinix Atlanta Data Center Georgia State Implementation Plan (SIP) Construction & Operating Permit application on October 3, 2025, requesting authorization for the construction and operation of a proposed data center in Henry County, Georgia, which is designated as an attainment area. The proposed facility will include diesel-fired emergency generators that will provide electricity to the data center during an emergency (i.e., when power from the electric grid to the data center is interrupted).

The proposed facility will be classified as a Title V source of air emissions with respect to the New Source Review (NSR) permitting program. As such, Equinix Atlanta Data Center requested a SIP permit that will transition to a Title V permit for the proposed facility in accordance with the Georgia Rules for Air Quality Control (GRAQC) 391-3-1-.03(1) & (2). The facility is accepting a facility-wide 249 tons per year (tpy) NO_x limit in order to be a synthetic minor source to avoid major source permitting with respect to the Prevention of Significant Determination (PSD) permitting program.

Purpose of Application

In Application No. 29899, Equinix Atlanta Data Center (hereafter known as the 'Facility') proposes to construct and operate 149 U.S. EPA Tier 2 and Tier 3 certified diesel fuel-fired engine generators and one diesel fuel-fired fire pump at a computer processing, data preparation and processing facility in Henry County Georgia. The facility's diesel-fired emergency generators will provide electricity to the data center during an emergency (i.e., when power from the electric grid to the data center is interrupted).

Other sources of emissions at the proposed facility will consist of cooling towers and diesel belly storage tanks for each generator.¹ There will be no stationary combustion sources present at the facility aside from the emergency standby generators.

¹ The cooling towers and diesel belly tanks are exempt from state air permitting requirements pursuant to GRAQC 391-3-1-.03(6)(c)3 and GRAQC 391-3-1-.03(6)(e)18.

Pollutant	Emissions Factor (lb/Mgal)	Emissions Per 3,500 kW Engine		Building Total Emissions	
		(lb/yr)	(tpy)	(lb/yr)	(tpy)
NO _x	379.54	3,416	1.71	122,970	61.48

A Public Advisory was issued on October 8, 2025, and expired on November 7, 2025. Comments were received by the Division from the Sierra Club and the general public, which were taken into consideration during the drafting of the permit and associated narrative.

Equipment List

Source Code	Capacity	Description	Installation Date	Construction Date
E7-E150	3.62 MW	Stationary Diesel-Fired Generator/Engine	2025+	2025+
E3-E6	1.0 MW	CAT D1000-GC	2025+	2025+
E1	0.25 MW	CUM QSL9-G7	2025+	2025+
E2	210 HP	Clarke JU6H-UF50	2025+	2025+

Emissions Summary

Potential-to-Emit (PTE) represents the maximum potential emissions that could occur following the proposed project. To calculate PTE rates for the emergency generators, the Facility used emissions factors and/or a not-to-exceed multiplier for NO_x, filterable particulate matter (PM filterable), carbon monoxide (CO), and volatile organic compounds (VOC) provided by the manufacturers, Caterpillar, Clarke, and Cummins. Emissions standards for a U.S. EPA Tier 3 certified engine were used for the Cummins 250 kW engine. Sulfur dioxide (SO₂), condensable particulate matter (PM condensable), hazardous air pollutant (HAP), and toxic air pollutant (TAP) emissions were calculated using U.S. EPA AP-42 emissions factors. Greenhouse gas (GHG), emissions were calculated using 40 CFR Part 98. Criteria pollutant emissions from the critical engines at the Facility were calculated conservatively assuming all engines were Cummins 3,500 kW engines since these are the worst-case engines for criteria pollutant emissions when compared to the Caterpillar 3,620 kW engines. HAP and TAP emissions were calculated and modeled conservatively assuming all engines were the Caterpillar 3,620 kW engines since these are the worst-case engines for toxics modeling when compared to the Cummins 3,500 kW engines. Although they are exempt from permitting, emissions from cooling towers and diesel storage tanks were included for completeness. Cooling tower emissions were calculated based on manufacturer-provided data and local sampling data from the Henry County Water Association and the City of Hampton. Tanks emissions were calculated using manufacturer-provided data and the U.S. EPA's web-based TANKS 5.1 tool. As discussed in Section 2.2 of the application, the Facility is requesting a Facility-wide NO_x limit of 249 tpy to remain below PSD thresholds. Emissions from the Facility will be calculated using each engine's diesel consumption in gallons and the engine specific emissions factors detailed in the PTE calculations.

A summary of PTE calculations is shown in Table C-1 of Appendix C of the application. An example calculation of the NO_x PTE emissions as presented in the Tables of Appendix C is as follows:

Pollutant	Emissions Factor (lb/Mgal)	Emissions Per 3,500 kW Engine		Building Total Emissions	
		(lb/yr)	(tpy)	(lb/yr)	(tpy)
NO _x	379.54	3,416	1.71	122,970	61.48
Pollutant	Emissions Factor (lb/Mgal)	Emissions Per 250 kW Guard Shack Engine		Total Emissions	
		(lb/yr)	(tpy)	(lb/yr)	(tpy)
NO _x	151.85	116.07	0.06	116.07	0.06
Pollutant	Emissions Factor (lb/Mgal)	Emissions Per Fire Pump Engine		Total Emissions	
		(lb/yr)	(tpy)	(lb/yr)	(tpy)
NO _x	210.85	106.08	0.05	106.08	0.05
Pollutant	Emissions Factor (lb/Mgal)	Emissions Per 1,000 kW Engine		Building Total Emissions	
		(lb/yr)	(tpy)	(lb/yr)	(tpy)
NO _x	271.47	761.23	0.38	761.23	0.38

Each 3,500 kW Engine:

lb/yr = 379.5 lb/Mgal*9,000 gal/yr *1 Mgal/1,000 gal = 3,416 lb/yr
 tpy = 3,416 lb/yr*1 tpy/2000 lbs = 1.71 tpy

Each 1,000 kW Engine:

lb/yr = 271.47 lb/Mgal*2,804 gal/yr *1 Mgal/1,000 gal = 761.23 lb/yr
 tpy = 761.23 lb/yr*1 tpy/2,000 lbs = 0.38 tpy

One Building Total:

lb/yr = 3,416 tpy *36 engines = 122,970 lb/yr
 tpy = 122,970 lb/yr*1 tpy/2,000 lbs = 61.48 tpy

lb/yr = 761.23 lb/yr *1 engine = 761.23 lb/yr
 tpy = 761.23 lb/yr*1 tpy/2,000 lbs = 0.38 tpy

One building total ~ 61.87 tpy NO_x

Total NO_x from all 3,500 kw and 1,000 kw engines in 4 buildings:

(61.87 tpy)*4 = **247.48 tpy**

Guard Shack Engine:

Total Guard Shack Engine Emissions:

$$\text{lb/yr} = 151.85 \text{ lb/Mgal} * 764 \text{ gal/yr} * 1 \text{ Mgal}/1,000 \text{ gal} = 116.07 \text{ lb/yr}$$

$$\text{tpy} = 116.07 \text{ lb/yr} * 1 \text{ tpy}/2,000 \text{ lbs} = \mathbf{0.06 \text{ tpy}}$$

Fire Pump Engine:

Total Fire Pump Engine Emissions:

$$\text{lb/yr} = 210.85 \text{ lb/Mgal} * 503 \text{ gal/yr} * 1 \text{ Mgal}/1,000 \text{ gal} = 106.08 \text{ lb/yr}$$

$$\text{tpy} = 106.08 \text{ lb/yr} * 1 \text{ tpy}/2,000 \text{ lbs} = \mathbf{0.05 \text{ tpy}}$$

Facility Wide Total NOx Emissions:

$$\text{Total NOx Emissions} = 247.48 \text{ tpy} + 0.06 \text{ tpy} + 0.05 \text{ tpy} \sim \mathbf{247.6 \text{ tpy}}$$

These calculations presented in Table C-1 of the application and the Table below demonstrate that the Facility will be a minor source with respect to the Prevention of Significant Deterioration (PSD) permitting program as it does not trigger the 250 tpy threshold for any NSR pollutant. Additionally, the Facility will be an area source of HAP. The Facility proposes a 249 tpy emissions limit for NOx, which will be tracked using each engine's fuel consumption to maintain the Facility's minor NSR status.

Facility-Wide Emissions
(in tons per year)

Pollutant	Potential Emissions
PM/PM ₁₀	7.91
PM _{2.5}	7.55
NOx	249 ²
SO ₂	0.17
CO	24.91
VOC	16.50
Maximum Individual HAP (Benzene)	0.08
Total HAPs	0.17
Greenhouse Gases	14,663

² Permit Condition 2.1 limits Facility-wide NOx Emissions to 249 tons per year (tpy) per twelve consecutive month period.

Regulatory Applicability*Federal Regulations**Part 60, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR 60) New Source Performance Standard (NSPS) Subpart III—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

The following sources are subject to NSPS in 40 CFR 60 Subpart III:

(2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:

- Manufactured after April 1, 2006, and are not fire pump engines, or
- Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

The facility wishes to construct 149 (One Hundred and Forty-Nine) emergency generators and 1 (One) emergency fire pump. Based on the date of construction and operation, the new emergency generators are subject to the emission limits stated in §60.4202(b).

40 CFR Part 60, Subpart III establishes NO_x, PM, CO, SO₂, and VOC emissions standards, fuel, testing, monitoring, recordkeeping, and reporting requirements for compression ignition engine units constructed (i.e., ordered) after July 11, 2005, non-fire pump engines manufactured after April 1, 2006, and fire pump engines manufactured after July 1, 2006. 40 CFR §60.4202(a) and §60.4202(b) establish exhaust emissions standards for NO_x, PM, CO, and VOC. All proposed engines will meet the U.S. EPA Tier 2 and Tier 3 emissions standards and will therefore meet or exceed the requirements found in 40 CFR §60.4202(a) or §60.4202(b).

The proposed engines will be subject to 40 CFR Part 60, Subpart III and will conform with the fuel requirements in 40 CFR §60.4207 by using ultra-low sulfur diesel (ULSD) with a maximum sulfur content of 15 parts per million (ppm). Requirements for the proposed engines also include the use of the non-resettable hour meters, maintaining operational records including date, hour meter readings, and reason for operation, and operating in accordance with the definition of an emergency stationary internal combustion engine at 40 CFR §60.4219.

Part 63, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR 63) National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines-Subpart ZZZZ

The following sources are subject to the NESHAP in 40 CFR 63 Subpart ZZZZ

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

- A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work, and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30 and is not used to propel a motor vehicle or a vehicle used solely for competition.

- A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
- An area source of HAP emissions is a source that is not a major source.

The facility proposes to operate 149 internal combustion engines as emergency generators and one emergency fire pump at a facility that has HAP emissions under the major source threshold, classifying it as an area source, therefore all of the emergency generators within the facility are subject to 40 CFR 63 Subpart ZZZZ.

In accordance with 40 CFR 63.6590(c), an affected source that meets any of the criteria in paragraphs (c)(1) through (7) of 40 CFR 63.6590 must meet the requirements of this part by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

The emergency generators within the facility meet the criteria established by 40 CFR 63.6590(c)(1) because the generators are classified as a new or reconstructed stationary RICE located at an area source. The generators will demonstrate compliance with 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines, therefore no further requirements apply for the emergency generators and fire pump in the facility.

Part 70, Chapter I, Title 40 of the Code of Federal Regulations (40 CFR 70) – State Operating Permits Programs

This regulation contains the provisions for establishing a federal permitting program for “major sources” (Title V) of emissions. Henry County is an attainment county in which the major source threshold for NO_x emissions is 100 tons per year. Potential NO_x emissions result in a PSD major source status for the facility. However, the facility wishes to take a self-imposed limit guaranteeing NO_x emissions levels will remain under 250 tons per year and will be applying for a Title V Permit. Therefore, the facility will be subject to 40 CFR Part 70 but not subject to PSD regulations.

State Rules

Georgia Rule 391-3-1-.02(2)(b) – Visible Emissions

This rule limits opacity to 40 percent from any air contaminant source, except as provided in other more restrictive or specific rules or subdivisions of the regulation. All of the permitted sources are subject to this regulation.

The facility will comply with this limitation through the exclusive use of ultra-low sulfur diesel fuel in its generator engines, which will result in negligible visible emissions.

Georgia Rule 391-3-1-.02(2)(g) – Sulfur Dioxide

This regulation regulates the sulfur content of fuel. For a fuel burning source with a heat input capacity less than 100 MMBTU/hr, the regulation limits the fuel sulfur content to less than 2.5 percent, by weight. All of the generators have the capability to burn fossil fuel, thus making the equipment subject to this regulation, however this limit will be subsumed by the NSPS Subpart IIII sulfur limit of 15 ppm.

Georgia Rule 391-3-1-.02(2)(yy)- Emission of Nitrogen Oxides from Major Sources

This rule prohibits the emission of nitrogen oxides from any source to exceed 25 tons per year to all sources located in Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding and Rockdale counties unless such source has been approved by the Director as meeting the appropriate requirement for all reasonably available control technology (RACT) in controlling the emissions of nitrogen dioxides. Potential NOx emissions result in an area source status for the Facility with the request for a PSD avoidance limit of 249 tpy facility wide on a twelve-month consecutive basis. Though the potential NOx emissions from the facility will exceed 25 tons per year, per GRAQC 391-3-1-02(2)(yy), the requirements of this rule do not apply to individual equipment at the source which are subject to (jjj), (lll), (mmm), or (nnn). The proposed emergency generators will be subject to Rule (mmm); therefore, as the proposed emergency generators will be the only sources of NOx at the facility, the provisions of Rule (yy) will not apply.

Georgia Rule 391-3-1-.02(2)(mmm)-Emissions from Stationary Gas Turbines and Stationary Engines used to Generate Electricity

Each generator that operates less than 500 hours per twelve consecutive months will meet the definition of Rule (mmm)8 for engines at data centers and will be limited to the hours of 10 p.m. and 4 a.m. for routine testing and maintenance during the months of May through September.

Georgia Rule 391-3-1-.03(2) – Operating SIP Permit

The regulation requires that a permit be obtained before an air-pollutant source is operated. The facility has submitted an application to comply this regulation for the construction of one hundred and forty-nine (149) generators and one diesel-fueled emergency fire pump.

Georgia Rule 391-3-1-.03(6)(c)1 – Storage Tanks Exemptions

The regulation exempts all petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 pounds per square inch atmosphere (psia). The diesel belly storage tanks are used to store diesel fuel with a true vapor pressure of 0.01 psia, thus rendering an exemption from permitting.

Permit Conditions

Permit Condition 2.1 limits facility-wide NOx emissions to 249 tons during any consecutive twelve-month period.

Permit Condition 2.2 limits the operation of emergency generators to meet the criteria of Georgia Rule 391-3-1-.02(2)(mmm)8 for data centers.

Permit Condition 2.3 limits opacity to 40 percent from the emergency generators (6-minute average).

Permit Condition 2.4 requires the Permittee to comply with NSPS Subpart A and Subpart IIII for the operation of the emergency generators.

Permit Condition 2.5 limits the accumulated non-emergency service time for the emergency generators to less than 100 hours per year and prohibits any operation other than emergency operation, maintenance checks and readiness testing.

Permit Condition 2.6 requires the facility to fuel the emergency generators with distillate fuel oil that has a maximum sulfur content of 15 ppm and either a minimum cetane index of 40 or maximum aromatic content of 35 percent (by volume).

Permit Condition 2.7 requires the Permittee to comply with NESHAP Subpart A and Subpart ZZZZ for the operation of the emergency generators.

Permit Conditions 2.8 and 2.9 supply further requirements for the Permittee to comply with NSPS Subpart A and Subpart IIII for the operation of the emergency generators.

Permit Condition 2.10 requires that the fuel oil fired in the emergency generators (Source Codes: EG1 through EG149) be diesel fuel oil and the definition of such.

Permit Condition 2.11 limits the hours of operation for the engines to ensure the Maximum Ground Level Concentration (MGLC) for benzene is less than the Acceptable Ambient Concentration (AAC).

Permit Condition 3.1 requires the Permittee to take all reasonable precautions with any operation, process, handling, transportation or storage facilities to prevent fugitive emissions or air contaminants.

Permit Condition 4.1 requires the Permittee to operate the emergency generators according to the manufacturer's written specifications, instructions or procedures developed by the Permittee that are approved by the engine manufacturer over the entire life of the engine.

Permit Condition 5.1 requires the continuous operation of any continuous monitoring system required by the Division and installed by the Permittee except during calibration checks, zero and span adjustments or period of repair. Any maintenance performed on any continuous monitoring system should be conducted expeditiously.

Permit Condition 5.2 requires the Permittee to install a non-resettable continuous monitoring system for each emergency generator to track and record the cumulative hours of operation during emergency service as well as non-emergency service and to record the reason the generator was in operation and to install a non-resettable continuous monitoring system to monitor generator fuel consumption in gallons.

Permit Condition 5.3 requires the Permittee to verify that each shipment of diesel fuel oil received for combustion in each emergency generator 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 2.12.

Permit Conditions 6.1 and 6.2 provide guidelines for performance, compliance testing and maintenance of the engines.

Permit Condition 7.1 requires the Permittee to notify the Division of initial startup.

Permit Condition 7.2 requires the Permittee to maintain monthly operating records for each emergency generator and maintain them in a format suitable for inspection for a period of five years.

Permit Condition 7.3 requires the Permittee to use the monthly emergency service operating data to calculate monthly, the twelve-month rolling total of the emergency service operating time for each generator during each twelve consecutive month period and notify the Division in writing within 15 days if any of the twelve-month rolling total emergency service operating time exceeds 500 hours.

Permit Condition 7.4 requires the Permittee to use the monthly non-emergency service operating data to calculate monthly, the twelve-month rolling total of the non-emergency service operating time for each generator during each twelve consecutive month period and notify the Division in writing within 15 days if any of the twelve-month rolling total non-emergency service operating time exceeds 100 hours.

Permit Condition 7.5 requires the Permittee to demonstrate compliance with emission standards specified in 40 CFR 60, Subpart IIII for the emergency generators (Source Codes: EG1 through EG149) 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 according to the manufacturer's specifications and records of this action shall be maintained in a format suitable for inspection.

Permit Condition 7.6 requires the Permittee to submit an annual report with the requirements specified in 40 CFR 60.4214(d) if the emergency generators (Source Codes: EG1 through EG149) are operated for the purpose specified in 40 CFR 60.4211(f)(3)(i).

Permit Condition 7.7 requires the Permittee to keep records of each shipment of distillate fuel received for firing the generators to show compliance with the applicable requirements in Condition 2.6.

Permit Condition 7.8 provides the equation for calculating monthly NO_x emissions from the emergency generators and emergency fire pumps.

Permit Condition 7.9 requires the Permittee to calculate total NO_x emissions (in tons) from the emergency generators during the last twelve consecutive calendar months, using the equation in Condition 7.8.

Permit Condition 7.10 requires the Permittee to calculate monthly the rolling total operating hours for each engine in emergency and non-emergency status during the consecutive twelve-month period.

Permit Condition 8.1 gives the Division the right to amend the provisions of this permit in the event determination is made requiring additional control of emissions from the facility to provide for the continued protection of public health, safety and welfare.

Permit Condition 8.2 requires the Permittee to calculate and pay an annual Permit fee to the Division.

Toxic Impact Assessment

The Facility has prepared and included as a part of this application a Toxic Ambient Impact Assessment (TIA) pursuant to GEPD's *Guideline for Ambient Impact Assessment of Toxic Air Pollutant Emissions*, revised May 2017 (GEPD Guideline for TIA). G.A.C. 391-3-1-.02(2)(a)3(ii) requires emissions limitations or other requirements to safeguard the public health, safety, and welfare of the people of Georgia. This safeguarding is demonstrated in air quality permit applications with the completion of a TIA for sources of air emissions proposed for construction/modification.

The Division regulates the emissions of toxic air pollutants (TAP) through the Guideline described above. A TAP is defined as any substance that may have an adverse effect on public health, excluding any specific substance that is covered by a State or Federal ambient air quality standard.

According to the Guideline, dispersion modeling at a new facility should be completed for each TAP having potential emissions above the specific Minimum Emission Rate (MER) provided. The Facility prepared a project-related toxic air pollutant (TAP) emissions inventory on a PTE basis, based on the proposed 249 tpy NO_x limit.

Table 1 below compares the selected significant TAPs to the MER. Note that there was a Minimum Emissions Rate (MER) exceedance for benzene.

Table 1. TAP Emissions Compared to MER

Pollutant	Minimum Emission Rate ¹ (lb/yr)	Facility-Wide Potential Emissions (lb/yr)	Exceeds MER?
Benzene	3.16E+01	1.43E+02	Yes
Toluene	1.22E+06	5.18E+01	No
Xylene	2.43E+06	3.56E+01	No
Formaldehyde	2.21E+01	1.47E+01	No
Acetaldehyde	1.11E+03	4.77E+00	No
Acrolein	8.51E+01	1.47E+00	No
Napthalene	7.30E+02	2.39E+01	No
Ethyl Benzene	1.10E-01	4.10E+00	No

1. From Appendix A of EPD's Guideline for Ambient Impact.

As there was a Minimum Emissions Rate (MER) exceedance for benzene, further analysis of ambient air concentration due to engine emissions of benzene was conducted using the American Meteorological Society (AMS) / U.S. EPA Regulatory Model (AERMOD) air dispersion model. More detailed discussion of the air toxics modeling is provided in Appendix D of the application.

Modeling Results and Compliance

The AERMOD dispersion modeling results for benzene indicated that predicted concentrations are below the allowable ambient limits. Specifically, the maximum 15-minute benzene concentration at or beyond the property boundary was roughly 12.630 (µg/m³), which is well under the short-term AAC of 1,600 g/m³. Specifically, the maximum 1-hour benzene concentration at or beyond the property boundary was roughly 9.57 (µg/m³), which is well under the short-term AAC of 1,600 g/m³. Likewise, the maximum annual average benzene concentration was on the order of 4.53E-03 µg/m³, which is below the annual AAC of 0.13 µg/m³. In other words, the worst-case modeled benzene impacts were within acceptable concentrations set by Georgia's guidelines, for both acute and chronic exposure periods. The 15-minute, 1-hour and annual benzene concentrations for each group are shown in Table 2 below.

Table 2: Summary of Ambient Impact Assessment of Toxic Air Pollutant Emissions - Benzene

Evaluation Receptor	Maximum 15-Min Ground-Level Conc. ^(b) (µg/m ³)	Maximum 1-Hour Ground-Level Conc. (µg/m ³)	Short-Term AAC ^(a) (µg/m ³)	Impact?	Annual Maximum Ground-Level Conc. (µg/m ³)	Annual AAC (µg/m ³)	Impact?
Caterpillar Engines							
Full Grid	12.63	9.57	1,600	Negligible	4.53E-03	0.13	Negligible
Maximum Sensitive Receptor	10.8	8.18		Negligible	1.74E-03		Negligible

Table 2: Summary of Ambient Impact Assessment of Toxic Air Pollutant Emissions – Benzene, cont'd

Evaluation Receptor	Maximum 15-Min Ground-Level Conc. ^(b) (µg/m ³)	Maximum 1-Hour Ground-Level Conc. (µg/m ³)	Short-Term AAC ^(a) (µg/m ³)	Impact?	Annual Maximum Ground-Level Conc. ^(c) (µg/m ³)	Annual AAC (µg/m ³) ^(a)	Impact?
Cummins Engines							
Full Grid	10.04	7.61	1,600	Negligible	3.54E-03	0.13	Negligible
Maximum Sensitive Receptor	7.20	5.45		Negligible	1.48E-03		Negligible

^(a)GEPD “Appendix A – list of TAP, AAC and MER”, June 2025.

^(b)A 1-Hour to 15-Min concentration conversion factor of 1.32 was used per GA TAP modeling guidelines

^(c)Maximum Annual Modeled Concentration averaged over the 5-year modeled period.

In summary, while benzene emissions warranted a closer look due to exceeding the MER, the dispersion modeling demonstrated that the facility will not cause any exceedance of the AAC for benzene. All other TAPs were below their MER, and thus by definition will not exceed their respective AACs. This outcome confirms that the project complies with Georgia’s air toxics requirements.

The Division performed a separate modeling review as provided in the DMU Modeling Review Report that is attached in Appendix A and agrees with the Facility’s risk assessment that all TAPs were below the AACs at residential and/or business areas.

Summary & Recommendations

Based upon the above considerations, it is recommended that Permit Number 7374-151-0068-E-01-0 be issued to the Equinix Atlanta Data Center, LLC for their facility located at 1100 Site Parkway in Henry County. It has been determined that Equinix Atlanta Data Center, LLC is classified as a Title V facility.

The facility must comply with NOx emissions limitations, limitations on the combined generator capacity and limitations on the hours of operation to constitute emergency generator usage and remain below major source thresholds.

A Public Advisory was issued on October 8, 2025, and expired on November 7, 2025. Comments were received by the Division from the Sierra Club and the general public, which were taken into consideration during the drafting of the permit and associated narrative.

APPENDIX A

EPD'S PSD Dispersion Modeling and Air Toxics Review

DMU Modeling Review Report – TAP

General Information

Application #	29899
AIRS #	151-00068
Applicant	Equinix Atlanta Data Center
Application Receipt Date	10/03/2025
Modeling Review Request Date	N/A
Assigned SSPP PM1	Cynthia Dorrough
Assigned Permit Engineer	Renee Browne
Date of Review Report Submission	11/19/2025
Assigned DMU Modeler	Joanna Rodgers
Approved by DMU PM1	11/19/2025
List of Reviewed Pollutants	Benzene

Review Summary

MGLCs of All TAPs below AACs?	☒ Yes	☐ No
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Modeling Results

Table 1. TAP MGLC Assessment for the Caterpillar Engines Scenario

TAP	Averaging Period	AAC ($\mu\text{g}/\text{m}^3$)	Modeler	Max Modeled Conc. ($\mu\text{g}/\text{m}^3$)	Receptor UTM Zone: 16	
					Easting (m)	Northing (m)
Benzene	15-minute	1,600	Applicant	12.6270	749,877.37	3,695,003.26
			DMU	12.6199	749,877.37	3,695,003.26
	Annual	0.13	Applicant	0.00453	749,679.78	3,694,861.85
			DMU	0.00453	749,679.78	3,694,861.85

Table 2. TAP MGLC Assessment for the Cummins Engines Scenario

TAP	Averaging Period	AAC ($\mu\text{g}/\text{m}^3$)	Modeler	Max Modeled Conc. ($\mu\text{g}/\text{m}^3$)	Receptor UTM Zone: 16	
					Easting (m)	Northing (m)
Benzene	15-minute	1,600	Applicant	10.0446	749,705.01	3,695,255.51
			DMU	12.6199	749,877.37	3,695,003.26
	Annual	0.13	Applicant	0.00354	749,679.78	3,694,861.85
			DMU	0.00354	749,679.78	3,694,861.85

Addendum to Narrative

The 30-day public review started on April 23, 2026 and ended on May 22, 2026. Comments were received on October 14, 2025, October 15, 2025, November 3, 2025, April 23, 2026, May 21, 2026 and May 22, 2026.

Equinix Atlanta Data Center Comments**Comment 1**

Equinix understands that air dispersion modeling requires inputs in terms of a time-based emissions value (rather than a fuel consumption value). However, those air toxics emissions were based upon worst-case engine load emissions across those 37 hours. Equinix requested a fuel consumption-based operating limit to allow operational flexibility for all operations, which will occur at a variety of engine loads. The fuel limit offers the flexibility to operate an engine as needed within the fuel throughput restrictions found in Condition 7.8 in order to ensure that business continuity is maintained even during unplanned operation or outages. Equinix therefore requests the removal of the hours-based operating limit.

Reply 1

The Division requires the facility to demonstrate alternate modeling scenarios that allows hours up to the AAC limits to quantify NOx emissions in tons per year (tpy). If the values exceed the Condition 2.1 limit of 249 tons of NOx Emissions during any twelve consecutive month period, then this demonstrates the limit is in itself limiting compared to the alternate scenarios and Condition 2.1 is sufficient to protect the environment per the Georgia Guideline for Ambient Impact Assessment of Toxic Air Pollutant Emissions (May 2017) (Air Toxic Guideline). Therefore, Conditions 2.11 and 7.10 will remain in the permit until the Permittee is able to provide the demonstration.

Sierra Club Comments

Comments were received from the Sierra Club on behalf of itself, and its 9,000 Georgia members. The letter was received on May 22, 2026 and was signed by Isabell Ariza, Managing Attorney, and Caden Koontz, Legal Assistant. Please refer to Appendix C to view the entire comments. EPD will only address the comments relevant to the draft permit and application below.

Comment 1

EPD must consider the cumulative impacts that data centers have on Georgia's air quality and grid planning.

Response 1

The Division is aware of and monitoring the new developments in the MSA area. The Division required the performance of a TIA assessment of the project TAP emissions from the source. The applicant performed the TIA assessment, and the results were well below the AACs. The TIA analysis does not require a cumulative impact analysis. The Division issues enforceable air permits that adhere to the requirements of the Clean Air Act, federal regulations, and Georgia air quality regulations to assure that the facility will maintain its emissions to the standards required by federal and state regulations, and which will protect public health and the environment.

Comment 2

EPD must require data centers to install more protective emissions control technology on their backup generators.

Response 2

The Division acknowledges the recommendation to develop guidance for emission controls for diesel backup generators at new data centers. Should the Division determine that such guidance is necessary, it will be developed with stakeholder engagement.

While the Division is responsible for protecting Georgia's air quality through the regulation of emissions from industrial and mobile sources according to state and federal regulations, the Division cannot dictate to the facility how to design or build the facility.

As a part of the permit application review process, the Division requires the performance of a toxic impact assessment (TIA) of the project's facility-wide toxic air pollutant (TAP) emissions from the source in accordance with the *Guideline for Ambient Impact Assessment of Toxic Air Pollutant Emissions*. The applicant performed the TIA assessment, and the results were below the AACs with the proposed EPA Tier II standard engines. The state is allowed to be more stricter than federal regulations, yet it is not in the Division's procedures to require the type of control technology for the engines as the federal and state regulations are being met.

Comment 3**EPD must be transparent about the data center permitting process.****Response 3**

The Permittee did not request any information in the application to be held confidential; all data submitted to the Division was available to the public. The comment on enhanced transparency and data collection for the public is duly noted.

General Public and Public Hearing Comments

Comments were received prior to the public notice end date of May 22, 2026. Please refer to Appendix A for all the comments received during the comment period.

Comment 1

In an e-mail dated Wednesday October 15, 2025, Citizen Kendra Sutherland states her concerns about the lack of enhanced control technologies for the generators as noted below;

“Progressive data centers are deploying multi-stage exhaust treatment:

Diesel Oxidation Catalysts (DOC): Reduce CO and HC by 85-90% through platinum-coated honeycomb substrates

Diesel Particulate Filters (DPF): Wall-flow filters capture 99% of PM with automated ash cleaning cycles

Selective Catalytic Reduction (SCR): Urea injection systems achieve 0.1 g/kWh NO_x via V2O5-O3/TiO₂ catalysts

(Johnson Matthey, “Emission Control Technologies for Data Center Generators).

Microsoft’s Quincy data center prototype combines these with HVO100 biofuel, cutting PM emissions by 86% versus ULSD (Microsoft).”

She also states the catastrophic health effects as the diesel generators are so close to people and schools and water parks, recreation area, ball fields, etc. She also states that the facility emissions will impact thousands of people negatively and the area being a mostly black city, is an example of environmental racism.

She implores the rejection of this application and requires Emissions Control Technologies of the highest level to be employed as well as a monitoring strategy and alert system to monitor air quality and ensure compliance for the sake of the city's residents.

Response 1

The Division required the performance of a toxic impact assessment (TIA) of the facility-wide toxic air pollutant (TAP) emissions from the source. The applicant performed the assessment, and the results were below the AACs. The Division issues enforceable air permits that adhere to the requirements of the Clean Air Act, federal regulations, and Georgia air quality regulations to assure that the facility will maintain its emissions to the standards required by federal and state regulations, and which will protect public health and the environment.

The Division is responsible for protecting Georgia's air quality through the regulation of emissions from industrial and mobile sources according to state and federal regulations. The Division cannot dictate to the facility how to design or build the facility.

Comment 2

In an e-mail dated Tuesday October 14, 2025, Citizen Kerri Spayd opposes this permit being issued with concerns that the generators will be detrimental to the environment and notes that there is already an enormous environmental burden and listed several facilities. She implores the Division to evaluate the existing environmental burden before any issuance of new permits.

Response 2

This comment is duly noted. See response to Comment 1.

Comment 3

In an e-mail dated Tuesday October 14, 2025, Citizen Carl Chomko opposes this permit being issued with concerns that the generators will be detrimental to the environment.

Response 3

This comment is duly noted. See response to Comment 1.

Comment 4

In an e-mail dated Sunday November 2, 2025, Citizen Kendra Sutherland provided an anti-application petition ([Petition · Demand Emissions controls for 150 diesel generators at Equinix data center in Hampton, GA - Hampton, United States · Change.org](#)) with 123 signatures and restates the comment 1 above.

Response 4

This comment is duly noted. See response to Comment 1.