

NARRATIVE

TO: Cynthia Dorrough
FROM: Alexander Lagunas
DATE: February 19, 2026

Facility Name: **QTS Fayetteville I, LLC**
AIRS No.: 113-00073
Location: Fayetteville, GA (Fayette County)
Application #: 30027
Date of Application: January 9, 2026

Background Information

QTS Fayetteville I, LLC is a data center operating under Air Permit No. 7374-113-0073-S-01-0, issued on October 11, 2023, and its two amendments. It is located in Fayetteville, Fayette County, which is in attainment for all criteria pollutants. The facility consists of 235 diesel-fired emergency generators and two (2) diesel-fired fire pumps. It operates as a synthetic minor source with respect to Title V by limiting diesel fuel consumption to 670,000 gallons per 12 consecutive months.

The emergency generators (Source Codes: EG001 through EG235) operate as *emergency stationary ICE* as defined in 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ, and as *emergency standby stationary engines at data centers* as defined in Georgia Rule 391-3-1-.02(2)(mmm).

The facility submitted App. 28934 on June 26, 2023, for the construction and operation of a greenfield data center with 205 emergency generators and one (1) diesel-fired fire pump, and a facility-wide fuel consumption limit of 670,000 gallons per year. The facility submitted App. 29080 on November 1, 2023, for the construction and operation of an additional two (2) emergency generators for a total of 207 emergency generators and one (1) diesel-fired fire pump with no change in the facility-wide fuel consumption limit. The facility submitted App. 29366 on July 18, 2024, for the construction and operation of an additional 28 emergency generators and one (1) fire pump for a current total of 235 emergency generators and two (2) fire pumps with no change to the facility-wide fuel consumption limit.

Purpose of Application

QTS Fayetteville I, LLC submitted App. 30027, received on January 9, 2026, for the construction and operation of an additional 337 emergency generators and nine (9) fire pumps and the proposal of a new fuel consumption limit. The proposed fuel consumption limit will allow the facility to remain a minor source with respect to PSD; however, the facility will now be a major source with respect to Title V. Other modifications include the removal of an existing make and model and redesignation of Source Codes for existing emergency generators.

A Public Advisory was issued and expired on February 27, 2026. Comments were received by the Division and were taken into consideration in the drafting of this permit.

Updated Equipment List

Emission Units			Associated Control Devices	
Source Code	Description	Installation Date	Source Code	Description
EG001 – EG229	227 Main Generators & 2 House Generators 2.5 MW CAT 3516C Diesel-fired	2023	--	--
EG230 – EG546*	317 Main Generators 2.5 MW CAT 3516C Diesel-fired	2026*	--	--
EG547 - EG552**	4 Chiller Yard Generators and 2 House Generators 1.25 MW CAT C32 <i>Formerly EG230 through EG235</i> Diesel-fired	2024	--	--
EG553 - EG572*	20 House Generators 1.25 MW CAT C32 Diesel-fired	2026*	--	--
FP001 & FP002	2 Fire Pumps Clarke JU4H-UFADP0 Diesel-fired	2024	--	--
FP003 - FP011*	9 Fire Pumps Clark JU4H-UFADP0 Diesel-fired	2026*	--	--

*proposed within current application

** Note: Former EG230 through EG235 were redesignated as EG547 through EG552

2.25 MWe MTU DS2250 has been removed as an option for EG001 through EG229. These units will be 2.5 MW CAT 3516C.

The facility consists of 572 diesel-fired emergency generators and 11 fire pumps. The emergency generators and fire pumps are divided into thirteen (13) DC Groups, each representing a data center building and associated emergency generators and fire pumps. The table below shows each DC Group, the emergency generators and fire pumps assigned to each DC Group, and the fuel consumption limit (in gallons) allocated to each DC Group.

DC Group	Source Codes	Fuel Consumption Limit per 12 consecutive months
--	--	Gallons
DC1	EG001 – EG046, EG547, FP001	131,681
DC2	EG047 – EG060, EG548 – EG549, FP002	42,595
DC3	EG061 – EG088, EG550	80,622
DC4	EG089 – EG130, EG551 – EG552, FP003	121,792
DC5	EG131 – EG172, EG553 – EG554	121,645
DC6	EG173 – EG214, EG555 – EG556, FP004	121,792
DC7	EG215 – EG286, EG557 – EG558, FP005	206,645
DC9	EG287 – EG322, EG559, FP006	103,396
DC10	EG323 – EG336, EG560 – EG561, FP007	42,595
DC11	EG337 – EG406, EG562 – EG564, FP008	202,413
DC12	EG407 – EG490, EG565 – EG568, FP009	243,437
DC13	EG491 – EG518, EG569 – EG570, FP010	82,194
DC14	EG519 – EG546, EG571 – EG572, FP011	82,194

*Note: DC8 does not exist.

Storage Tanks

Source Code	Capacity (gallons)	Contents	Installation Date	True Vapor Pressure (psia)
--	8,400	229 Diesel fuel tanks for emergency generators EG001 – EG229	2023	~0.77
--	8,400	317 Diesel fuel tanks for emergency generators EG230 – EG546	2026*	~0.77
--	140	Two (2) diesel fuel tanks for fire pumps	2023	~0.77
--	140	Nine (9) diesel fuel tanks for fire pumps*	2026*	~0.77
--	4,200	Six (6) diesel fuel tanks for emergency generators EG547 – EG552**	2024	~0.77
--	4,200	20 diesel tanks for emergency generators EG553 – EG572*	2026*	~0.77

*proposed within current application

**Note: Former EG230 through EG235 were redesignated as EG547 through EG552

Emissions Summary**Facility-Wide Emissions**
(in tons per year)

Pollutant	Potential Emissions			Actual Emissions		
	Before Mod.	After Mod.	Emissions Change	Before Mod.	After Mod.	Emissions Change
PM/PM ₁₀ /PM _{2.5}	5.81	8.97	+3.16	--	--	--
NO _x	99.93	236.11	+136.18	--	--	--
SO ₂	6.95e-2	1.64e-1	+9.48e-2	--	--	--
CO	50.60	119.56	+68.96	--	--	--
VOC	18.05	24.98	+6.93	--	--	--
Max. Individual HAP	3.56e-2	8.42e-2	+4.85e-2	--	--	--
Total HAP	7.23e-2	1.71e-1	+9.85e-2	--	--	--
Total GHG (if applicable)	7,511	17,743	+10,232	--	--	--

Potential emissions were calculated based on the fuel consumption limits allocated to each DC Group. The fuel consumption limits were selected to limit NO_x emissions below the PSD major source threshold of 250 tons per year, to limit VOC below the 25 tpy threshold to avoid Georgia Rule 391-3-1-.02(2)(tt), and to limit benzene's MGLC below the applicable AAC in the toxic impact assessment.

The facility will be a major source with respect to Title V because emissions of NO_x and CO are greater than the 100 tons per year. The facility will be required to submit a Title V initial application within one year of the startup of any emergency generator or fire pump added in this application. The facility will remain a minor source with respect to PSD because emissions for all criteria pollutants remained below the 250 tons per year threshold, and data centers are not one of the 28 named source categories subject to the 100 tons per year threshold.

Regulatory Applicability**40 CFR 52.21– Prevention of Significant Deterioration of Air Quality**

Avoidance.

The facility will limit NO_x emissions to be below the PSD major source threshold of 250 tpy by limiting the fuel consumption of the emergency generators (Source Codes: EG001 through EG572) and the fire pump (Source Codes: FP001 through FP011). The fuel consumption is divided into thirteen individual fuel consumption limits for each DC Group.

40 CFR 70 – Title V

Applicable.

Upon the startup of any proposed emergency generator (Source Codes: EG230 through EG546 and EG553 through EG572) or fire pumps (Source Codes: FP003 through FP011), the facility will be classified as a

major source with respect to Title V because potential emissions of NO_x are greater than the major source threshold of 100 tpy.

A Title V application will be required to be submitted within one year of the startup of any proposed emergency generator.

40 CFR 60 Subpart IIII – “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”

Applicable to the emergency generators (Source Codes: EG230 through EG546 and EG553 through EG572) and the fire pumps (Source Codes: FP003 through FP011).

This subpart applies to stationary compression ignition (CI) internal combustion engines (ICE) that commenced construction after April 1, 2006. The emergency generators are CI ICE constructed after April 1, 2006, and thus are subject to this subpart.

All emergency generators are subject to the following:

- Emission standards:
 - NMHC+NO_x, CO, and PM, either Tier 2 or Tier 3
 - Fuel content, including sulfur, cetane, and aromatic content
- Operational requirements
 - Operate and maintain according to the manufacturer's specification/instructions
 - Criteria to meet the definition of an emergency generator under this subpart
- Monitoring requirements
 - Non-resettable hour meter
- Performance Testing
 - Maintenance plan and performance testing if not operating according to the manufacturer's instructions
- Recordkeeping
 - Record of hours of operation in emergency and non-emergency service
 - Record of non-emergency hours of operation on a 12-month rolling total
 - Record of manufacturer's instructions or maintenance plan
 - Compliance with emissions standards by purchasing, installing, and configuring according to manufacturer's instructions
 - Annual report if operating as specified in 40 CFR 60.4211(f)(3)(i)

40 CFR 60 Subpart ZZZZ – “National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines”

Applicable to the emergency generators (Source Codes: EG230 through EG546 and EG553 through EG572) and the fire pumps (Source Codes: FP003 through FP011).

This subpart applies to any stationary reciprocating internal combustion engine (RICE) located at a major or area source of HAP emissions.

The emergency generators are located at an area source of HAP emissions and thus are subject to this subpart. The emergency generators are considered *new* because they were constructed after June 12, 2006 and located at an area source of HAP emissions. *New* RICE located at an area source meet the requirements

of this subpart by meeting the requirements of 40 CFR 60 Subpart IIII. The emergency generators are subject to 40 CFR 60 Subpart IIII and thus no further requirements apply.

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

Applicable to the emergency generators (Source Codes: EG230 through EG546 and EG553 through EG572) and the fire pumps (Source Codes: FP003 through FP011).

This rule applies to emission sources that are also subject to other emission limitations under the Georgia Rules. The emergency generators are also subject to Rules (g) and (mmm) and thus subject to this rule.

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

Applicable to the emergency generators (Source Codes: EG230 through EG546 and EG553 through EG572) and the fire pumps (Source Codes: FP003 through FP011).

The emergency generators fire diesel fuel and thus are subject to this rule. The generators are subject to a sulfur content limitation of 2.5 percent sulfur by weight; however, the limitation imposed by 40 CFR 60 Subpart IIII of 15 ppm is more restrictive.

Georgia Rule 391-3-1-.02(2)(tt) – “VOC Emissions from Major Sources”

Avoidance.

This rule applies to facilities with potential emissions of VOC that exceed the threshold set in a listed county.

The facility is located in Fayette County, which has a threshold of 25 tpy. The facility has potential emissions greater than 25 tpy. The facility proposes a fuel consumption limit for the emergency generators and fire pumps to limit VOC emissions below the 25 tpy threshold.

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

Not applicable.

This rule applies to facilities with potential emissions of NO_x that exceed the threshold set in a listed county.

The proposed facility will be located in Fayette County, which has a threshold of 25 tpy. the emergency generators (Source Codes: EG001 through EG572) and the fire pump engines (Source Codes: FP001 through FP011) have a combined potential emission greater than 100 tpy NO_x; however, individual equipment subject to Georgia Rule (mmm) are excluded for the purpose of determining applicability of this rule. Thus, the facility is not subject to this rule.

Georgia Rule 391-3-1-.02(2)(mmm) – “NO_x Emissions from Stationary Gas Turbines and Stationary Engines”

Applicable to the emergency generators (Source Codes: EG230 through EG546 and EG553 through EG572).

This rule applies to stationary engines used to generate electricity with a capacity greater than 100 kW and less than or equal to 25 MW in a listed county.

The emergency generators are stationary engines used to generate electricity with a capacity between 100 kW and 25 MW and located in Fayette County, one of the listed counties, and thus are subject to this rule.

The emergency generators are classified as *emergency standby stationary engines at a data center*, as defined in (mmm)8, and will be not subject to the emission standard in 391-3-1-.02(2)(mmm)1.

The fire pump engines (Source Codes: FP001 through FP011) do not generate electricity and thus are not subject to this rule.

Permit Conditions

Conditions have been retained from Air Permit No. 7374-113-0073-S-01-0, except as noted.

Condition 2.1 sets a fuel consumption limit for each group of emergency generator (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011), as part of PSD Avoidance and Rule (tt) Avoidance. The table identifies which units and fuel consumption limit applies to each group. *Replaces Condition 2.1.*

Condition 2.2 establishes the applicability of 40 CFR 60 Subpart A and 40 CFR 60 Subpart IIII to the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011). *Former Condition 2.2.*

Condition 2.3 sets emission standards for NMHC+NO_x, CO, and PM for the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011), per 40 CFR 60 Subpart IIII. *Combines former Conditions 2.3 and 2.12.*

Condition 2.4 sets emission standards for visible emissions during acceleration and lugging mode for the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011), per 40 CFR 60 Subpart IIII. *Former Condition 2.4.*

Condition 2.5 sets fuel standards for the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011), per 40 CFR 60 Subpart IIII. *Former Condition 2.5.*

Condition 2.6 sets the criteria for the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011) to be considered *emergency generators* with respect to 40 CFR 60 Subpart IIII. *Former Condition 2.7.*

Condition 2.7 establishes the applicability of 40 CFR 63 Subpart A and 40 CFR 63 Subpart ZZZZ to the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011). *Former Condition 2.9.*

Condition 2.8 sets a limit on visible emission on the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011), per Georgia Rule (b). *Former Condition 2.10.*

Condition 2.9 sets the criteria for the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011) to be considered *emergency standby stationary engines* with respect to Georgia Rule (mmm). *Former Condition 2.8.*

Condition 2.10 sets criteria for the diesel fuel fired in the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011). *Former Condition 2.11.*

Condition 3.1 is the standard fugitive emissions conditions. *Reworded Condition 3.1.*

Condition 4.1 requires the operation of the emergency generators (Source Codes: EG001 through EG572) and the fire pumps (Source Codes: FP001 through FP011) according to the manufacturer's instructions, per 40 CFR 60 Subpart IIII. *Combines former Conditions 4.1 and 4.2.*

Condition 4.2 requires the clear labeling of each emergency generator (Source Codes: EG001 through EG572) and fire pump (Source Codes: FP001 through FP011) with its Source Code. *New to permit.*

Condition 5.1 requires a non-resettable hour meter and a system to record fuel usage on each emergency generator (Source Codes: EG001 through EG572) and fire pump (Source Codes: FP001 through FP011). *Replaces Condition 5.1.*

Condition 5.2 requires verification of each shipment of diesel fuel to be fired in each emergency generator (Source Codes: EG001 through EG572) and fire pump (Source Codes: FP001 through FP011). *Former Condition 5.2.*

Condition 6.2 sets the criteria to demonstrate compliance if the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011) are not operated according to the manufacturer's instructions, per 40 CFR 60 Subpart IIII. *New to permit.*

Former Condition 7.1 was not retained as it required notification of startup, which has already occurred.

Former Condition 7.4 was divided into Conditions 7.1 and 7.2 to track fuel consumption on a monthly and 12 consecutive month basis.

Condition 7.1 calculates and records the monthly fuel consumption of each DC Group (Group Codes: DC1 through DC7 and DC9 through DC14) for each calendar month.

Condition 7.2 calculates and records the 12 consecutive month total fuel consumption of each DC Group (Group Codes: DC1 through DC7 and DC9 through DC14), using the records required in Condition 7.1, to demonstrate compliance with Condition 2.1.

Former Condition 7.5 was divided into Conditions 7.3 through 7.4 to separate hours of operation recordkeeping from non-emergency service recordkeeping on a monthly and 12 consecutive month basis. Notification language removed as it is not required for emergency generators. Language from 40 CFR 63 Subpart ZZZZ removed because it is not applicable. See Regulatory Applicability for explanation.

Condition 7.3 requires records of the emergency and non-emergency service of the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011), per 40 CFR 60 Subpart IIII.

Condition 7.4 calculates and records the calendar year total non-emergency operation of each emergency generator (Source Codes: EG001 through EG572) and fire pump (Source Codes: FP001 through FP011), per 40 CFR 60 Subpart IIII.

Condition 7.5 requires record of the manufacturer's written instructions for the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011), per 40 CFR 60 Subpart IIII. *Replaces former Condition 7.2b.*

Condition 7.6 requires the purchase of a certified engine to demonstrate compliance with 40 CFR 60 Subpart IIII. *Combines former Conditions 2.6, 2.13, and 7.2a*

Condition 7.7 requires submittal of a report if the emergency generators (Source Codes: EG001 through EG572) and fire pumps (Source Codes: FP001 through FP011) as operated as specified in 40 CFR 60.4211(f)(3)(i), per 40 CFR 60 Subpart IIII. *Replaces former Condition 7.6.*

Condition 7.8 requires records of the diesel fuel shipments to demonstrate compliance with Condition 2.11. *Replaces former Condition 7.3.*

Condition 8.3 requires the submittal of a Title V application within one year of the startup of any proposed emergency generator (Source Codes: EG230 through EG546 and EG553 through EG572) or fire pumps (Source Codes: FP003 through FP011). *New to permit.*

Toxic Impact Assessment

The facility conducted a toxic impact assessment. Toxic Air Pollutants (TAP) of interest were identified by comparing the potential emissions of each TAP against its minimum emission rate (MER). Table 1 below shows identified TAPs and the comparison of potential emissions to the respective MER.

Table 1. Minimum Emission Rate (MER) comparison

TAP	Facility-wide potential emissions	MER	Potential Emissions above MER?
--	lb/yr	lb/yr	--
Benzene	174.7	31.6	Yes
Toluene	63.2	1,216	No
Xylenes	43.4	24,333	No
Formaldehyde	17.8	22.1	No
Acetaldehyde	5.7	1,107	No
Acrolein	1.8	85.1	No
Naphthalene	29.3	730	No

The comparison to the MER identified benzene as a TAP of interest. Further screening was conducted using SCREEN3 to determine if the model-predicted 15-minute and annual average concentrations were below the applicable allowable ambient concentration (AAC) for benzene. For the purpose of SCREEN3 modeling, the generators were divided into thirteen (13) individual stacks, each representing an individual data center building and associated emergency generators and fire pumps. Table 2 below shows each stack, the data center building represented, the number of each generator type at each stack, and the fuel consumption limit allocated to each stack, which is used to determine the benzene emission rate.

Table 2. Modeled Stack parameters

Stack	DC	Number of each generators type modeled at each stack				Fuel consumption limit
		CAT 3516C emergency generators	CAT 3516C house generator	CAT C32 house or chiller yard generators	Fire pump	
1	1	46	0	1	1	136,630
2	2	13	1	2	1	44,196
3	3	28	0	1	0	83,652
4	4	42	0	2	1	126,370
5	5	42	0	2	0	126,217
6	6	42	0	2	1	126,370
7	7	72	0	2	1	214,413
9	9	36	0	1	1	107,283
10	10	13	1	2	1	44,196
11	11	70	0	3	1	210,022
12	12	84	0	4	1	252,587
13	13	28	0	2	1	85,283
14	14	28	0	2	1	85,283

Note: There is no stack 8.

The facility used SCREEN3 to model the 1-hour benzene concentration impact from each of the thirteen stacks from 0 to 1000 meters from the modeled stack and then determined the annual and 15-minute MGLCs. In order to determine the impact from other stacks, each stack's maximum impact was defined as the sum of the maximum impact from the stack plus the sum of the maximum impact at 100 meters for stacks that are located between 100 and 200 meters from the stack plus the sum of the maximum impact at 200 meters for stacks that are located between 200 and 400 meters from the stack plus the sum of the maximum impact at 400 meters for stacks that are located between 400 and 600 meters from the stack plus the sum of the maximum impact at 600 meters for stacks that are located between 600 and 800 meters from the stack plus the sum of the maximum impact at 800 meters for stacks that are located between 800 and 1000 meters from the stack plus the sum of the maximum impact at 1000 meters for stacks that are located greater than or equal to 1000 meters from the stack.

Table 3 below demonstrates the annual modeled impact for each stack while Table 4 shows the 15-minute modeled impact for each stack.

Table 3. Facility-wide Modeled Maximum Annual Average Benzene Concentration

Stack	Annual MGLC	Annual AAC	Exceeds AAC?
--	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	--
1	7.93e-2	1.30e-1	No
2	4.96e-2		No
3	6.22e-2		No
4	6.20e-2		No
5	6.71e-2		No
6	8.54e-2		No
7	1.18e-1		No
9	7.66e-2		No
10	3.81e-2		No
11	1.16e-1		No
12	1.29e-1		No
13	5.23e-2		No
14	5.41e-2		No

Table 4. Facility-wide Modeled Maximum 15-minute Average Benzene Concentration

Stack	15-minute MGLC	15-minute AAC	Exceeds AAC?
--	$\mu\text{g}/\text{m}^3$	$\mu\text{g}/\text{m}^3$	--
1	669	1,600	No
2	418		No
3	525		No
4	523		No
5	566		No
6	721		No
7	997		No
9	647		No
10	321		No
11	979		No
12	1,088		No
13	441		No
14	457		No

The facility has demonstrated that the annual and 15-minute MGLC is below the applicable AAC for benzene for all thirteen stacks. These results are based on the fuel consumption limits allocated for each stack, and as a result, these will become enforceable limits in the permit.

Note: the finalized fuel consumption limits are lower than the fuel consumption limits used in the modeling because the finalized values were adjusted to lower VOC emission below the applicability threshold of Georgia Rule 391-3-1-.02(2)(tt). The values used in the modeling are more conservative than the lower finalized fuel consumption limits, and the toxic impact assessment conducted is considered valid for the lower values.

Summary & Recommendations

I recommend that Permit No. 7374-113-0073-S-01-0 be issued to QTS Fayetteville I, LLC for the construction and operation of an additional 337 emergency generators and nine (9) fire pumps. The facility will be a major source with respect to Title V and a minor source with respect to PSD by limiting fuel consumption. The facility will be required to submit a Title V application upon startup of any proposed emergency generator or fire pump. Public Advisory expired on February 27, 2026. Comments were received by the Division and were taken into consideration in the drafting of this permit.