## STATE OF TENNESSEE TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



OPERATING PERMIT Issued Pursuant to Tennessee Air Quality Act

Date Issued: July 17, 2013 Permit Number: 067474P

Date Expires: July 16, 2023

Issued To: American Tower Corporation – Providence TN2 #308975 Installation

Installation Address: 5765 Sevierville Road

Seymour

Installation Description: Emergency Diesel Fired Generator, 131 HP, 80

KW

Emission Source Reference No.

05-0328-01 NSPS/NESHAP

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

#### CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated June 28, 2013, and is signed by Scot Sandefur, Director EH&S for the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

Dany R. Steplans
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

## **State Requirements**

2. The horsepower rating for this source is 131 brake horsepower.

TAPCR 1200-03-09-.01(1)(d) and the application dated March 20, 2013

The Technical Secretary may require the permittee to prove compliance with this horsepower rating.

3. Only diesel fuel that meets the requirements in condition 15 shall be used as fuel for this source.

TAPCR 1200-03-09-.01(1)(d) and the application dated March 20, 2013

Compliance with this requirement shall be assured by maintaining records of fuel usage.

4. Particulate Matter (TSP) emitted from this source shall not exceed 0.6 pounds (lb) per million Btus (MM Btu)(0.55 pounds per hour).

TAPCR 1200-03-06-.02(2)

Compliance with this requirement shall be assured by operating the diesel generator as designed and complying with condition 3.

5. Sulfur dioxide (SO<sub>2</sub>) emitted from this source shall not exceed 0.27 pounds per hour based on a daily average.

TAPCR 1200-03-14-.01(3)

Compliance with this requirement shall be assured by operating the diesel generator as designed and complying with condition 3.

6. Volatile organic compounds (VOC) emitted from this source shall not exceed 0.33 pounds per hour based on a daily average.

TAPCR 1200-03-07-.07(2)

Compliance with this requirement shall be assured by operating the diesel generator as designed and complying with condition 3.

7. Nitrogen oxides (NOx) emitted from this source shall not exceed 4.06 pounds per hour based on a daily average.

TAPCR 1200-03-07-.07(2)

Compliance with this requirement shall be assured by operating the diesel generator as designed and complying with condition 3.

8. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period per one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

9. The following annual emissions are based on a total of 600 hours of operation (100 non-emergency and 500 emergency hours), these emission totals will be used to calculate annual emission fees:

Annual Emissions for Fees (tons per year)				
0.17	0.08	1.22	0.10	

TAPCR 1200-03-26-.02(6)

10. Record keeping requirements for this source, including all data and calculations, must be updated and maintained based on the following schedule:

Record Keeping Type	Update Requirement
Monthly Log	Recorded within 30 days after the end of the month
Weekly Log	Recorded within 7 days after the end of the week
Daily Log	Recorded within 7 days after the end of the day

TAPCR 1200-03-09

11. The permittee shall comply with all applicable federal and state regulations concerning the operation of this source. This includes but is not limited to, federal regulations published under 40 CFR part 63 for sources of hazardous air pollutants and 40 CFR part 60, New Source Performance Standards.

This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.

TAPCR 1200-03-09-.03(8)

NESHAP (National Emission Standards for Hazardous Air Pollutants) Stationary RICE (reciprocating internal combustion engines)

40 CFR Part 63 Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

12. A new stationary RICE located at an area source must meet the requirements of 40 CFR part 63 subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines. No further requirements apply for such engines under 40 CFR part 63 subpart ZZZZ.

40 CFR §63.6590(c)

# 40 CFR Part 60: Standards of Performance for New Stationary Sources (NSPS)

# 40 CFR Part 60 Subpart IIII: Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE)

Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new non-road CI engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

40 CFR §60.4205 (b)

14. Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in the following paragraph:

For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new non-road CI engines for the same model year and maximum engine power in 40 CFR §89.112 and 40 CFR §89.113 for all pollutants beginning in model year 2007.

40 CFR §60.4202(a)(2)

15. Beginning October 1, 2010, owners and operators of stationary CI ICE subject to 40 CFR part 60 subpart IIII with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR §80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

40 CFR §60.4207(b)

16. If you are an owner or operator and must comply with the emission standards specified in 40 CFR part 60 subpart IIII, you must do all of the following, except as permitted in condition 18.

Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions,

Change only those emission-related settings that are permitted by the manufacture, and

Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

40 CFR §60.4211(a)

17. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (1) through (3) of this condition. In order for the engine to be considered an emergency stationary ICE under 40 CFR part 60 subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) of this condition, is prohibited. If you do not operate the engine according to the requirements in paragraphs (1) through (3) of this condition, the engine will not be considered an emergency engine under 40 CFR part 60 subpart IIII and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (2)(i) through (iii) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph.
- (2)(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Technical Secretary 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.
- (2)(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (2)(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 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 and emergency demand response provided in paragraph (2) of this condition. Except as provided in paragraph (3)(i) of this condition, 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.
- (3)(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 owner or operator 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.

CN-0827 (Rev. 2-13)

40 CFR §60.4211(f)

18. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.

40 CFR §60.4211(g)

19. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 of 40 CFR part 60 subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

40 CFR §60.4214(b)

### **State Requirements**

20. The permittee shall apply for renewal of this operating permit not less than sixty (60) days prior to the permit's expiration date.

TAPCR 1200-3-9-.02(3)

(end of conditions)

The permit application gives the location of this source as 35.84969 Latitude and -83.78735 Longitude.