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



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: JAN 2 9 2013

Permit Number:

966713P

Date Expires: January 1, 2014

Issued To:
American Tower Corporation
East Servierville #308917

Installation Address:

122 County Garage Road

Sevierville

Installation Description:

Diesel fueled emergency power generator with 80 kW engine

Emission Source Reference No.

78-0314-01

NSPS

40 CFR Part 60 Subpart IIII

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 November 9, 2012, and signed by Mr. Scot D. Sandefur, Director, EH&S of 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)

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

- 2. The maximum heat input capacity for the generator shall not exceed 307,195 British Thermal Units per hour (0.31 MMBtu/hr).
- 3. Operating time for non-emergency operation for this source shall not exceed 100 hours per calendar year. TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart IIII.
- 4. Only No. 2 diesel fuel shall be used as fuel for this source.
- 5. Pursuant to 40 CFR §60.4207(b), beginning October 1, 2010, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b), as follows:
  - (1) Sulfur content shall not exceed 15 ppm maximum for nonroad diesel fuel.
  - (2) Cetane index or aromatic content, as follows:
    - (i) A minimum cetane index of 40; or
    - (ii) A maximum aromatic content of 35 volume percent.
- 6. Particulate matter (TSP) emitted from this source shall not exceed 0.03 pound per hour. TAPCR 1200-03-09-.03(8) and 40 CFR §60.4205(a).
- 7. Sulfur dioxide  $(SO_2)$  emitted from this source shall not exceed 0.50 pound per hour.

The above emission limitation is established pursuant to 1200-03-14-.01(3) of the Tennessee Air Pollution Control Regulations and the information contained in the agreement letter dated January 21, 2013, from the permittee.

- 8. Carbon monoxide (CO) emitted from this source shall not exceed 0.20 pound per hour. TAPCR 1200-03-09-.03(8) and 40 CFR §60.4205(a).
- 9. Volatile organic compounds (VOCs) emitted from this source shall not exceed 0.81 pound per hour. TAPCR 1200-03-09-.03(8) and 40 CFR §60.4205(a).
- 10. Nitrogen oxides (NO $_x$ ) emitted from this source shall not exceed 0.81 pound per hour. TAPCR 1200-03-09-.03(8) and 40 CFR §60.4205(a).
- 11. Compliance with the emission limits in **Conditions 6, 7, 8, 9, and 10** is based on compliance with **Conditions 2 and 4** of this permit; and from the actual exhaust during a 5-mode test by the manufacturer, Generac.
- 12. The generator shall be equipped with a non-resettable hour meter prior to startup of the engine. TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart IIII.
- 13. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any 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-.03(6) and TAPCR 1200-03-05-.01(1)
- 14. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing on such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone 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 year. For owners and operators of emergency engines meeting standards under 40 CFR §60.4205 but not 40 CFR §60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

15. The permittee shall keep a log of the number of operating hours for each month and each twelve (12) consecutive month interval at this source, in a form that readily provides the information required in the following table and shows compliance with Conditions 3 and 14. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the month for which the data is required. The permittee shall retain this record at the source location for a period of not less than two (2) years and keep this record available for inspection by the Technical Secretary or their representative. TAPCR 1200-03-10-.02(2)(a).

## MONTHLY/YEARLY LOG: Source 78-0314-01

Year:	7				
Month	Hours Per Month	Hours Per 12 Consecutive Months	Month	Hours Per Month	Hours Per 12 Consecutive Months
January			July		
February		<u>-</u>	August		
March			September		
April			October		
May			November		
June		-	December	•	

The "Hours per 12 consecutive months" values are the sum of the hours in the 11 months preceding the month just completed + the hours in the month just completed. If data is not available for the 11 months preceding the initial use of this table, this value will be equal to the hours per month. For the second month it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 3 (2) represents 3 hours operated in 2 months].

- 16. This permit is valid only at this location.
- 17. Operating time for this source shall not exceed 500 hours per calendar year. TAPCR 1200-03-09-.03(8) and 40 CFR Part 60 Subpart IIII
- 18. The permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. TAPCR 1200-03-09-.03(8) and 40 CFR §60.4211(a)

Conditions continued on next page

19. The General Provisions of 40 CFR 60 shall apply to this source as indicated in the following table. TAPCR 1200-03-09-.03(8) and 40 CFR  $\S60.4218$ .

General Provisions citation	Subject of citation	Explanation
§60.1	General applicability of the General Provisions	
§60.2	Definitions	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	
§60.4	Address	
§60.5	Determination of construction or modification	
§60.6	Review of plans	
§60.7	Notification and Recordkeeping	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Except that §60.8 only applies to stationary CI ICE with a displacement of (>30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	
§60.10	State Authority	
§60.11	Compliance with standards and maintenance requirements	Requirements are specified in subpart IIII.
§60.12	Circumvention	
§60.13	Monitoring requirements	Except that §60.13 only applies to stationary CI ICE with a displacement of (230 liters per cylinder.
§60.14	Modification	
§60.15	Reconstruction	
§60.16	Priority list	,
§60.17	Incorporations by reference	
§60.18	General control device requirements	
§60.19	General notification and reporting requirements	

- 20. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards.
- 21. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.
- 22. This permit shall serve as a temporary operating permit from initial start-up to the receipt of a standard operating permit, provided the operating permit is applied for within thirty (30) days of initial start-up and the conditions of this permit and any applicable emission standards are met.
- 23. The permittee shall certify the start-up date of the air contaminant source regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS PERMIT, with the information required in  $\overline{A}$ ) and B) of this condition completed, to the Technical Secretary's representatives listed below:

- A) DATE OF START-UP: \_\_\_\_ / \_\_\_ / \_\_\_ / \_\_\_ year
- B) Anticipated operating rate: \_\_\_\_\_ percent of maximum rated capacity

For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the source for the production of product for sale or use as raw materials or steam or heat production.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature			Date	
·				
Signer's name (type or print)	Title	· · · · · · · · · · · · · · · · · · ·	Phone (with a	area code)
				•

Note: This certification is <u>not</u> an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to East Tennessee Permit Program and the Environmental Field Office at the addresses listed below no later than thirty (30) days after the air contaminant source is started-up.

East Tennessee Permit Program Division of Air Pollution Control 9th Floor, L & C Annex 401 Church Street Nashville, TN 37243-1531

Knoxville Environmental Field Office Division of Air Pollution Control 3711 Middlebrook Pike Knoxville, TN 37921

## **Emission Summary**

		Permit Number: 966713P
Source Status: New Modifica	ation Expansion Relocation	Permit Status: New⊠ Renewal
PSD□ NSPS⊠ NESHAPs□	Previous Permit Number: Const	ruction Operating

	Pounds/Hour			Tons/Year			Date of	*	Applicable Standard	
	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change	Data		1200-03-
TSP	0.03	0.03	0.03	0.01	0.01	0.01	+0.01	11/9/12	*	0903(8) & 40 CFR 60.4205(a)
SO <sub>2</sub>	0.50	0.50	0.50	0.13	0.13	0.13	+0.13	11/9/12	*	1401(3)
CO	0.20	0.20	0.20	0.05	0.05	0.05	+0.05	11/9/12	*	0903(8) & 40 CFR 60.4205(a)
VOC	0.81	0.81	0.81	0.20	0.20	0.20	+0.20	11/9/12	*	0903(8) & 40 CFR 60.4205(a)
NO <sub>X</sub>	0.81	0.81	0.81	0.20	0.20	0.20	+0.20	11/9/12	*	0903(8) & 40 CFR 60.4205(a)
CO <sub>2</sub> e	0.75	0.75	0.75	0.19	0.19	0.19	+0.19	11/9/12	*	40 CFR 98

<sup>\* -</sup> Source of data

The emission factors for TSP, CO, VOC, &  $NO_X$  were taken from the actual exhaust during a 5-mode test by the manufacturer, Generac.

Per agreement letter dated January 21, 2013, the company has agreed to a limit of 0.50 lb/hr and 0.13 tpy for SO<sub>2</sub>.

PERMITTING PROGRAM: <u>HLC</u> DATE: <u>1/28/2013</u>