

STATE OF TENNESSEE

DEPARTMENT OF ENVIRONMENT AND CONSERVATION

DIVISION OF AIR POLLUTION CONTROL WILLIAM R. SNODGRASS TENNESSEE TOWER 312 ROSA L. PARKS AVENUE, 15TH FLOOR NASHVILLE, TN 37243

October 21, 2013

Mr. Scot Sandefur, Director EH&S American Towers – Seymour TN #308919 P.O. Box 63604 Phoenix, AZ 85082

Re:

78-0317-01, log no. 67646,

American Towers - Seymour TN # 308919, 2452 McCleary Road, Sevierville, TN 37876

Construction Permit Application dated August 22, 2013

Dear Mr. Sandefur:

Enclosed is construction permit number 967646P.

There were no comments from the public during the 30 day comment period that ended October 20, 2013. This construction permit shall serve as a temporary operating permit provided the conditions of this construction permit and any applicable standards are met.

If you have questions regarding your permit, please contact Thomas Krinov at (615) 532-6812 or Thomas. Krinov@TN.gov.

Sincerely,

Vergil D. Murrell

John A. Trimmer, Chief

East Tennessee Permit Program

JAT/tak

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



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

Date Issued: October 21, 2013

Permit Number:

967646P

Date Expires: October 1, 2014

Issued To:

American Towers - Seymour TN #308919

Installation Address:

2452 McCleary Road

Sevierville

Installation Description:

One 131 Hp (80-kW) Diesel-Fired Emergency Generator

Emission Source Reference No.

78-0317-01

NSPS Subpart IIII NESHAP Subpart ZZZZ

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 August 22, 2013, and signed by Scot Sandefur, Director EH&S for the permitted facility. this person terminates employment or is assigned 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

CN-0754 (Rev. 2-13)

RDA-1298

- 2. The design rated power for this compression ignition engine is 131 Hp (80-kW). This source is subject to the requirements of 40 CFR part 60 Subpart IIII, 40 CFR \$89.112, \$89.113, and TAPCR 1200-03-09-.03(8).
- 3. Only No. 2 fuel oil and diesel fuel shall be used as fuels for this source.
- 4. Particulate Matter (TSP) emitted from this source shall not exceed 0.30 grams per kilowatt-hour (0.06 lb/hr). 40 CFR §60.4205(b)
- 5. Carbon Monoxide (CO) emitted from this source shall not exceed 5.0 grams per kilowatt-hour (0.88 lb/hr). 40 CFR §60.4205(b)
- Non-Methane Hydrocarbons and Nitrogen Oxides (NMHC + NO_X) emitted from this source shall not exceed 4.0 grams per kilowatt-hour (0.71 lb/hr). 40 CFR \$60.4205(b)
- 7. Sulfur Dioxide (SO_2) emitted from this source shall not exceed 0.27 pounds per hour. TAPCR 1200-03-14-.03(5)
- 8. Volatile Organic Compounds (VOCs) emitted from this source shall not exceed 0.32 pound per hour. TAPCR 1200-03-07-.07(2)
- 9. Compliance with the emission limits in Conditions 7 and 8 is based on compliance with Conditions 2 and 3 of this permit and AP-42, Chapter 3, Section 3, emission factors.
- 10. Compliance with the Particulate Matter, Carbon Monoxide and Non-Methane Hydrocarbons and Nitrogen Oxides emission limits are based on compliance with **Condition 2** of this permit and the manufacturer's certification of compliance with 40 CFR §89.112.
- 11. On the permit application dated August 22, 2013, the permittee stated this is an emergency generator; therefore based on EPA's policy the allowable emissions were calculated using 500 hours per calendar year.
- 12. Pursuant to 40 CFR \$60.4211(f), the permittee 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 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 the permittee does 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 this subpart 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) The permittee may operate the 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.

- (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 § 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.
- (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.
 - (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.
- 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. Pursuant to 40 CFR \$60.4207(b), the permittee shall purchase diesel fuel that meets the requirements of 40 CFR 80.510(b), as follows:
 - (1) Sulfur content shall not exceed 15 parts per million (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.
- 15. 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. 40 CFR \$60.4211(a)

- 16. The permittee shall comply with the PM, CO, and (NMHC + NOx) emission limitations 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 permittee shall maintain a record of this certification at the source location. The engine shall be installed and configured according to the manufacturer's specifications. 40 CFR §60.4211(c)
- 17. The source (91-0092-06) is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR Part 63, Subpart ZZZZ). Pursuant to 40 CFR \$63.6590(c), this affected source (which is a new stationary RICE located at an area source of HAP emissions) shall meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for this engine under 40 CFR Part 63.
- 18. The permittee must keep monthly records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for the following categories: (a) emergency operation, as specified in Condition 12, Paragraph(1), including what classified the operation as emergency; (b) maintenance checks and readiness testing, demand response, as specified in Condition 12, Paragraph(2); and (c) non-emergency operation, as specified in Condition 12, Paragraph(3). The permittee shall calculate the operating hours per calendar year. The permittee shall maintain the following log format or an alternative format which readily provides the same required information.

Logs for emergency stationary ICE

Month	Emergency Operation (hr/month	Emergency Operation (hr/calendar year)	Maintenance Checks and Readiness Testing (hr/month)	Maintenance Checks and Readiness Testing (hr/calendar year)	Non-Emergency Operation (hr/month)	Non-Emergency Operation (hr/calendar year)
		Column A		Column B		Column C
January						-
February					***	
Etc.						
December						

	Add Columns B+C	Add Columns C
Limit	100 hours	50 Hours
		N.W.

- 19. 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.
- 20. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.
- 21. This permit is valid only at this location.
- 22. This permit shall serve as a temporary operating permit from initial start-up to the receipt of a standard operating permit (regardless of the expiration date), 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 an air contaminant source regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS PERMIT,

with the information required in A) and B) of this condition completed, to the Technical Secretary's representatives listed below:

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

For the purpose of complying with this condition, "start-up" of the an air contaminant source shall be the date of the setting in operation of the an 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 area code)

Note: This certification is \underline{not} 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 the Compliance Validation Program and the Field Office at the addresses listed below, no later than thirty (30) days after the air contaminant source is started-up.

Compliance Validation Program
Division of Air Pollution Control
Tennessee Tower William R. Snodgrass Bldg.
312 Rosa L Parks Avenue, 15th Floor
Nashville, TN 37243

Knoxville Field Office Division of Air Pollution Control 3711 Middlebrook Pike Knoxville, TN 37921-6538

Or e-mail to:

APC.KnoxEFO@tn.gov

(End of conditions)

The permit application gives the location of this source as 35.91076 Latitude; -83.7027 Longitude.