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: March 19, 2013

Date Expires: March 1, 2023

Permit Number: 066917P

Issued To:

Tennessee Department of Correction -
Turney Center Industrial Complex

Installation Address:

1499 R.W. Moore Memorial Hwy
Only

Installation Description:

1750 KW Diesel-fired Emergency Generator (2347 Hp)
300 KW Diesel-fired Emergency Generator (402 Hp)

Emission Source Reference No.

41-0084-02
40 CFR Part 60 Subpart IIII
(for 300 kW generator only)

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 February 1, 2013 and signed by Thomas Robinson, AIA, Director of Facilities, Planning & Construction for the permitted facility. If 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)

Gary R. Stephens

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

SECTION I: The following conditions shall apply to all sections of this permit unless otherwise noted.

2. This source consists of a 1750 kW emergency generator manufactured in January 1997 and 300 kW emergency generator manufactured in May 2006. The total design rated power for this source is 2050 kW (2749 Hp).

3. Only ultra low sulfur diesel fuel, with a maximum sulfur content of 0.0015% (15 ppm), shall be used as fuel for these generators. Compliance with this operating restriction shall satisfy the requirements of 40 CFR §60.4207(b), as applicable to the 300 kW generator.

4. 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)

5. The issuance of this permit does not exempt the permittee from any requirements of the Environmental Protection Agency pertaining to emissions from the operation of this source.

6. This permit is valid only at this location.

7. A record of the operating hours for each generator shall be maintained at the source location to show compliance with Conditions 12 and 14.

8. The permittee shall apply for renewal of this operating permit not less than sixty (60) days prior to the permit expiration date, pursuant to Division Rule 1200-03-09-.02(3).

SECTION II: Source Specific Conditions

41-0084-02 1750 KW Diesel-fired Emergency Generator (2347 Hp).

9. The design rated power for this source is 1750 kW (2347 Hp).

(a) As an existing emergency generator (reciprocating internal combustion engine (RICE)) that was manufactured before April 1, 2006, this generator **is not** subject to the requirements of 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

(b) As an existing institutional emergency RICE generator located at an area source of HAP emissions, this generator **is not** subject to the requirements of 40 CFR Part 63, Subpart ZZZZ or Subpart A, General Provisions, except for the requirements of §63.6640(f)(1). (A Federal Amendment to eliminate the requirements under §63.6640(f)) is currently under review, but has not yet been promulgated. Thus this generator is still subject to §63.6640(f) at this time.) A copy of §63.6640(f)(1)is found at Attachment 1 of this permit.

10. Particulate matter (TSP) emitted from this generator shall not exceed 1.8 pounds per hour. This emission limitation is established pursuant to an agreement letter dated October 19, 2012. (TAPCR 1200-03-06-.01(7))

11. Sulfur dioxide (SO_2) emitted from this generator shall not exceed 0.1 pounds per hour. This emission limitation is established pursuant to an agreement letter dated October 19, 2012. (TAPCR 1200-03-14-.01(3))

(conditions continued on next page)

12. Nitrogen oxides (NO_X) emitted from this generator shall not exceed 56.3 pounds per hour or 14.1 tons per year. This tons per year emissions value is based on an operating time of 500 hours per year as an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions as per EPA memorandum from John Seitz, Director of the Office of Air Quality Planning and Standards, dated September 6, 1995.

41-0084-02 300 KW Diesel-fired Emergency Generator (402 Hp)

13. The design rated power for this generator is 300 kW (402 Hp).

(a) As an existing emergency generator (reciprocating internal combustion engine (RICE)) that was manufactured after April 1, 2006 (May, 2006), this generator **is** subject to the requirements of 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

(b) As an existing institutional emergency RICE generator located at an area source of HAP emissions and by meeting the requirements of 40 CFR Part 60, Subpart IIII, no further requirements apply for this engine under 40 CFR Part 63, Subpart ZZZZ or Subpart A, General Provisions.

14. Pursuant to 40 CFR §60.4211(f), 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 of 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. Any operation other than emergency operation, and maintenance and testing as permitted in this Condition, is prohibited.

15. Sulfur dioxide (SO_2) emitted from this source shall not exceed 1.0 pounds per hour. This emission limitation is established pursuant to an agreement letter dated October 19, 2012. (TAPCR 1200-03-14-.01(3))

NESHAP Requirements: 40 CFR Part, 60 Subpart IIII

16. Particulate matter (TSP) emitted from this source shall not exceed 0.54 grams per kilowatt hour (g/kW-hr). This emission limitation is established pursuant to Subpart IIII §60.4205(a).

17. Nitrogen oxides (NO_X) emitted from this source shall not exceed 9.2 grams per kilowatt hour (g/kW-hr). This emission limitation is established pursuant to Subpart IIII §60.4205(a).

18. Hydrocarbons (HC) emitted from this source shall not exceed 1.3 grams per kilowatt hour (g/kW-hr). This emission limitation is established pursuant to Subpart IIII §60.4205(a).

19. Carbon Monoxide (CO) emitted from this source shall not exceed 11.4 grams per kilowatt hour (g/kW-hr). This emission limitation is established pursuant to Subpart IIII §60.4205(a).

(end of conditions)

The permit application gives the location of this source as 35°49′54.60″ latitude; 87°41′16.56″ longitude.

Attachment 1

Tennessee Department of Correction
Turney Center Industrial Complex
Emission Source #41-0084-02
Permit #965356P

The applicable federal regulation referenced in Permit Condition # 9 is from Title 40: Protection of Environment, PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, Section 63.6640 (f)(1).

A copy of 40 CFR Part 63, Subpart ZZZZ, § 63.6640 (f)(1) follows:

(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE 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 of such units is limited to 100 hours per year. The owner or operator 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 RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.