

State of Mississippi



FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL PERMIT

Permit to Operate Air Emissions Equipment at a Synthetic Minor Source

THIS CERTIFIES

Tennessee Valley Authority, Perry W Davis Generating Station
Meridian Naval Air Station
Meridian, MS
Lauderdale County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. set., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: SEP 1 5 2010

Expires: AUG 3 1 2015

Permit No. 1460-00109

Agency Interest # 12779

*** Official MDEQ Permit - Version 1.1 ***

Table of Contents

Subject Item Inventory	
Facility Requirements.]
General Information	L -
Other Relevant Documents:	

Tennessee Valley Authority, Perry W Davis Generating Station
Subject Item Inventory
Permit Number:1460-00109
Activity ID No.: PER20080001

Subject Item Inventory:

ID	Designation	Description
AI12779	12779	Electric Power Generator
EQPT1	AA-001	17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
EQPT2	AA-002	17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
EQPT3	AA-003	17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
EQPT4	AA-004	17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
EQPT5	AA-005	17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
EQPT6	AA-006	12,000 Gallon horizontal fixed roof diesel fuel storage tank

Subject Item Groups:

ID	Description	Components
GRPT1	Internal Combustion Diesel Engines	EQPT2 17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
		EQPT3 17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
		EQPT4 17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
		EQPT5 17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine
		EQPT1 17.2 MMBTU/Hr (1825 KW) V-16, 4-Stroke Cycle IC Diesel Engine

KEY	
ACT = Activity	AI = Agency Interest
AREA = Area	CAFO = Concentrated Animal Feeding Operation
CONT = Control Device	EQPT = Equipment
IA = Insignificant Activity	MAFO = Animal Feeding Operation
RPNT = Release Point	TRMT = Treatment

Tennessee Valley Authority, Perry W Davis Generating Station Subject Item Inventory Permit Number:1460-00109

Activity ID No.: PER20080001

KEY

TRMT = Treatment

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 1 of 9

AI0000012779 (12779) Electric Power Generator:

Submittal/Action Requirements:

Condition No.	Condition
S-1	General Condition: Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began. [APC-S-2 II.B(10)]
S-2	Except as otherwise specified herein, the permittee shall Submit a certified annual synthetic minor monitoring report: Due annually, by the 31st of January for preceding calendar year. This report shall address any required monitoring specified in the permit and shall include the fuel oil sulfur content and hours of operation monitoring data. The report shall also provide the date, quantity, and sulfur content for any shipment(s) of fuel oil received which exceeded the sulfur content limit of 0.05% by weight and detail the disposition of the shipments. [APC-S-2 II.B(11)]

Condition No.	Condition
T-1	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49-17-29 1.b]
T-2	General Condition: The permittee shall at all times maintain in good working order and operate as efficiently as possible all air pollution control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. [APC-S-2 V.A]
T-3	General Condition: Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering state waters without the proper environmental permits. [Miss. Code Ann. 49-17-29 1.a(i and ii)]
T-4	General Condition: Any diversion from or bypass of collection and control facilities is prohibited except as provided for in Regulation APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [APC-S-1 Section 10]
T-5	General Condition: Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule. [APC-S-2 X]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 2 of 9

AI0000012779 (continued):

Condition No.	Condition
T-6	General Condition: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials: (a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and (b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission. [Miss. Code Ann. 49-17-21]
T-7	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to: (a) Violation of any terms or conditions of this permit (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or (c) A change in any condition that required either a temporary or permanent reduction or elimination of authorized air emissions. [APC-S-2 II.C]
T-8	General Condition: This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for this permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of the permit. [APC-S-2 II.B(15)b]
T-9	General Condition: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control. [Miss. Code Ann. 49-17-39]
T-10	General Condition: The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [APC-S-2 II.B(15)c]
T-11	General Condition: Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances. [APC-S-2 II.B(7)]
T-12	General Condition: This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board. [APC-S-2 XVI.B]
T-13	General Condition: This permit is for air pollution control purposes only. [APC-S-2 I.D(1)]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 3 of 9

AI0000012779 (continued):

Condition No.	Condition
T-14	General Condition: This permit is a Federally-approved permit to operate a synthetic minor source as described in Regulation APC-S-2, Section IV.D. [APC-S-2 IV.D]
T-15	General Condition: The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [APC-S-2 I.D(7)]
T-16	General Condition: The permittee shall furnish to MDEQ within a reasonable time any information MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to MDEQ along with a claim of confidentiality. [APC-S-2 II.B(15)d]
T-17	General Condition: This permit does not authorize a modification as defined in APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment". Modification is defined as "Any physical change in or change in the method of operation of a facility which increases actual emissions or potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include: (a) routine maintenance, repair, and replacement; (b) use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act; (d) use of an alternative fuel or raw material by a stationary source which: (i) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or (ii) the source is approved to use under any permit issued under 40 CFR 52.51 or under regulations approved pursuant to 40 CFR 51.166;
	(e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.51, or under regulations approved pursuant to Subpart I or 40 CFR 51.166; or (f) any change in ownership of the stationary source" [APC-S-2 I.D(2)]
T-18	General Condition: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. [APC-S-2 II.B(15)a]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 4 of 9

AI0000012779 (continued):

Condition No.	Condition
T-19	General Condition: The permittee shall retain all required records, monitoring data, supported information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to MDEQ as required by Applicable Rules and Regulations or this permit upon request. [APC-S-2 IX]
T-20	General Condition: The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit. [APC-S-2 II.B(5)]
T-21	General Condition: Emergencies (a) Except as otherwise specified herein, an emergency means any situation arising from sudden and reasonably unforseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met. (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence as follows: (i) an emergency occurred and that the permittee can identify the cause(s) of the emergency; (ii) the permitted facility was at the time being properly operated; (iii) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and (iv) the permittee submitted notice of the emergency to MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency which contained a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of any emergency has the burden of proof. (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein [APC-S-2 II.B(10)]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 5 of 9

AI0000012779 (continued):

Narrative Requirements:

Condition No.	Condition
T-22	General Condition: Upsets (a) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows: (i) an upset occurred and that the permittee can identify the cause(s) of the upset; (ii) the source was at the time being properly operated; (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit; (iv) the permittee submitted notice of the upset to the DEQ within five (5) working days of the time the upset began which contained a description of the upset, any steps taken to mitigate emissions, and corrective actions taken. (b) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof. (c) This provision is in addition to any upset provision contained in any applicable requirement. [APC-S-1 Section 10]

T-23 General Condition: Startups and Shutdowns

- (a) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows: (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above; (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
- (b) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
- (c) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply. [APC-S-1 Section 10]

T-24 General Condition: Maintenance

- (a) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following: (i) the permittee can identify the need for the maintenance; (ii) the source was at the time being properly operated; (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit; (iv) the permittee submitted notice of the maintenance to MDEQ within five (5) working days of the time the maintenance began or such other times as allowed by MDEQ, which contained a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (c) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. [APC-S-1 Section 10]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 6 of 9

AI0000012779 (continued):

Condition No.	Condition
T-25	General Condition: For renewal of this permit the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board. [APC-S-2 VIII]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 7 of 9

EQPT000000006 (AA-006) 12,000 Gallon horizontal fixed roof diesel fuel storage tank:

Condition No.	Condition
T-1	Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [APC-S-2 II.B(10)]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 8 of 9

GRPT000000001 (AE-001) Internal Combustion Diesel Engines:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Opacity	Opacity: The permittee shall not have emissions of opacity greater than or equal to 40 % as determined by EPA Reference Method 9, 40 CFR 60, Appendix A. [APC-S-1 3.1.a]
L-2		The permittee shall not burn any fuel other than No. 2 diesel fuel oil with a maximum sulfur content of 0.05% (by weight). [APC-S-2 II.B(10)]
L-3		Tthe permittee shall be limited to operating each generating unit to no more than 480 hours in any consecutive 12-month period. [APC-S-2 II.B(10)]
L-4		The permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines in 40 CFR 63, Subpart ZZZZ and the General Provisions in Subpart A. The permittee shall be in compliance with this subpart by May 3, 2013. [40 CFR 63_Subpart ZZZZ.63.6585]

Monitoring Requirements:

Condition No.	on Parameter	Condition
M-1		The permittee shall obtain and maintain a fuel receipt from the supplier for each shipment of fuel oil received which certifies that the sulfur content does not exceed 0.05% by weight. The permittee shall maintain these records and reports on site, or at such other site as approved by MDEQ, for at least five (5) years and shall make them available upon request by Office of Pollution Control personnel. [APC-S-2 II.B(11)]
M-2		The permittee shall report any exceedance of the limitations outlined in this permit to the MDEQ no later than ten (10) days following the end of the month in which the exceedance occurred and shall report the cause of the exceedance and the action(s) taken and/or to be taken to correct it. [APC-S-2 II.B(11)]

Tennessee Valley Authority, Perry W Davis Generating Station Facility Requirements Permit Number:1460-00109 Activity ID No.: PER20080001

Page 9 of 9

GRPT0000000001 (continued):

Record-Keeping Requirements:

Condition No.	Condition
R-1	The permittee shall keep records detailing the total number of operating hours of each generator for each month and each consecutive 12-month period. [APC-S-2 II.B(11)]
Submitta	al/Action Requirements:

Condition No.	Condition
S-1	The permittee shall submit the initial notification in accordance with 40 CFR 63.9(b)-(e) &(g)-(h) by September 1, 2010. [40 CFR 63_Subpart ZZZZ]

GENERAL INFORMATION

Tennessee Valley Authority, Perry W Davis Generating Station
Meridian Naval Air Station
Meridian, MS
Lauderdale County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
12779	Perry W Davis Generating Station	Official Site Name	6/16/1998	
146000109	Tennessee Valley Authority, Perry W. Davis Generating Station	Air-Synthetic Minor Operating	6/16/1998	6/1/2003
2807500109	TVA, Perry W Davis Generating Station	Air-AIRS AFS	6/16/1998	
146000109	Tennessee Valley Authority, Perry W. Davis Generating Station	Air-Synthetic Minor Operating	3/26/2004	2/28/2009
146000109	Tennessee Valley Authority, Perry W. Davis Generating Station	Air-Synthetic Minor Operating	9/15/2010	8/31/2015

Basin: Pascagoula River Basin

Latitude: 32° 33′ 20″ 1 tenths **Longitude**: 88° 36′ 20″ 7 tenths

Location Description:PG- Plant Entrance (General). Data collected by Marcus Brown on 10/31/2005. Elevation 308 feet. From the bases front gate travel east on Fletcher Road 7 tenths of a mile, the generating station will be on the left.