

# **State of Mississippi**



## WATER POLLUTION CONTROL PERMIT

Permit to Discharge Wastewater in Accordance with National Pollutant Discharge Elimination System

## THIS CERTIFIES

Entergy Mississippi Inc, Rex Brown Plant 1960 West Northside Drive Jackson, MS Hinds County

has been granted permission to discharge wastewater in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402(b) of the Federal Water Pollution Control Act.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: Permit No. MS0002381

Expires: Agency Interest # 2286

\*\*\* Draft Permit \*\*\*

# **Table of Contents**

Subject Item Inventory	.i
Facility Requirements	1
General Information	<b>.</b> -1

Entergy Mississippi Inc, Rex Brown Plant Subject Item Inventory Permit Number: MS0002381 Activity ID No.: PER20130001

## **Subject Item Inventory:**

ID	Designation	Description
AI2286	2286	Steam Electric Power Plant
RPNT7	MSR0002381-001	Outfall 001 (Low Volume Wastewater and Boiler Blowndown From Unit 3)
RPNT9	MSR0002381-003	Outfall 003 (Low Volume Wastewater and Boiler Blowdown From Units 1 and 4)
RPNT10	MSR0002381-004	Outfall 004 (Internal Outfall - Once Through Cooling Water From Units 3 and 4)
RPNT11	MSR0002381-006	Outfall 006 (Cooling Tower Blowdown From Unit 1)
RPNT12	MSR0002381-008	Outfall 008 (Low Volume Wastewater)
RPNT13	MSR0002381-009	Outfall 009 (Internal Outfall - Low Volume Wastewater From The Demineralizer)
RPNT14	MSR0002381-010	Outfall 010 (Cooling Lake System Discharge)
RPNT15	MSR0002381-011	Outfall 011 (Cooling Lake System Discharge)

## **Receiving Stream Relationships:**

Subject Item	Relationship	Receiving Stream
RPNT11 Outfall 006 (Cooling Tower Blowdown From Unit 1)	Discharges Into	Eubanks Creek
RPNT12 Outfall 008 (Low Volume Wastewater)	Discharges Into	Town Creek
RPNT14 Outfall 010 (Cooling Lake System Discharge)	Discharges Into	Eubanks Creek
RPNT15 Outfall 011 (Cooling Lake System Discharge)	Discharges Into	Town Creek
RPNT7 Outfall 001 (Low Volume Wastewater and Boiler Blowndown From Unit 3)	Discharges Into	Eubanks Creek
RPNT9 Outfall 003 (Low Volume Wastewater and Boiler Blowdown From Units 1 and 4)	Discharges Into	Town Creek

Entergy Mississippi Inc, Rex Brown Plant

Subject Item Inventory Permit Number: MS0002381

Activity ID No.: PER20130001

**KEY** 

ACT = Activity AI = Agency Interest

AREA = Area CAFO = Concentrated Animal Feeding Operation

CONT = Control Device EQPT = Equipment

IA = Insignificant Activity IMPD = Impoundment

MAFO = Animal Feeding Operation PCS = PCS

RPNT = Release Point TRMT = Treatment

WDPT = Withdrawal Point

Subject Item: Outfall 001 (Low Volume Wastewater and Boiler Blowndown From Unit 3)

RPNT00000000007: MSR0002381-001

			Dis	charge Limitat	ions			Monitoring Requirements			
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Flow Effluent	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	****	****	*****	****	2 Times per Week	Instantaneous Sampling	Jan-Dec	
Oil and grease Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	15 Monthly Average	20 Daily Maximum	mg/L	2 Times per Week	Grab Sampling	Jan-Dec	
pH Effluent	*****	*****	****	6.0 Minimum	****	9.0 Maximum	SU	2 Times per Week	Grab Sampling	Jan-Dec	
Solids (Total Suspended) Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	30 Monthly Average	100 Daily Maximum	mg/L	2 Times per Week	8-hr Composite	Jan-Dec	
Temperature (Deg. F) Effluent	*****	****	*****	****	Report Monthly Average	90 Daily Maximum	degrees F	3 Times per Week	Grab Sampling	Jan-Dec	

Subject Item: Outfall 003 (Low Volume Wastewater and Boiler Blowdown From Units 1 and 4)

RPNT00000000009: MSR0002381-003

			Dis	charge Limitat	ions			Monitoring Requirements			
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Flow Effluent	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	****	****	****	****	2 Times per Week	Instantaneous Sampling	Jan-Dec	
Oil and grease Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	15 Monthly Average	20 Daily Maximum	mg/L	2 Times per Week	Grab Sampling	Jan-Dec	
pH Effluent	*****	*****	****	6.0 Minimum	*****	9.0 Maximum	SU	2 Times per Week	Grab Sampling	Jan-Dec	
Solids (Total Suspended) Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	30 Monthly Average	100 Daily Maximum	mg/L	2 Times per Week	8-hr Composite	Jan-Dec	
Temperature (Deg. F) Effluent	*****	*****	****	*****	Report Monthly Average	90 Daily Maximum	degrees F	3 Times per Week	Grab Sampling	Jan-Dec	

Subject Item: Outfall 004 (Internal Outfall - Once Through Cooling Water From Units 3 and 4)

RPNT000000000010: MSR0002381-004

				Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorination Duration Effluent	****	*****	****	*****	Report Monthly Average	120 Monthly Maximum	min	Weekly	Measurement	Jan-Dec
Chlorine, free available Effluent	****	****	*****	****	0.2 Monthly Average	0.5 Monthly Maximum	mg/L	Weekly	8 Grab Samples	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	****	****	*****	****	Continuously	Pump Log	Jan-Dec
pH Effluent	*****	*****	*****	6.0 Minimum	****	9.0 Maximum	SU	Weekly	Grab Sampling	Jan-Dec

Subject Item: Outfall 006 (Cooling Tower Blowdown From Unit 1)

RPNT000000000011: MSR0002381-006

				Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorination Duration Effluent	*****	*****	*****	****	Report Monthly Average	120 Daily Maximum	min	Weekly	Measurement	Jan-Dec
Chlorine, total residual Effluent	****	****	*****	****	0.011 Monthly Average	0.019 Daily Maximum	mg/L	Weekly	8 Grab Samples	Jan-Dec
Chromium (Total Recoverable) Effluent	****	****	*****	****	0.042 Monthly Average	0.2 Daily Maximum	mg/L	Twice per Month	8-hr Composite	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	****	*****	****	****	Weekly	Instantaneous Sampling	Jan-Dec
pH Effluent	****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Twice per Month	Grab Sampling	Jan-Dec
Temperature (Deg. F) Effluent	****	****	*****	****	Report Monthly Average	90 Daily Maximum	degrees F	3 Times per Week	Grab Sampling	Jan-Dec
Zinc (Total Recoverable) Effluent	*****	*****	****	*****	0.0581 Monthly Average	0.0636 Daily Maximum	mg/L	Twice per Month	8-hr Composite	Jan-Dec

Subject Item: Outfall 008 (Low Volume Wastewater)

RPNT000000000012: MSR0002381-008

				Mon	itoring Require	ements				
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Copper (Total Recoverable) Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	0.005 Monthly Average	0.007 Daily Maximum	mg/L	2 Times per Week	8-hr Composite	Jan-Dec
Flow Effluent	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	****	2 Times per Week	Instantaneous Sampling	Jan-Dec
Lead (Total Recoverable) Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	0.00118 Monthly Average	0.030 Daily Maximum	mg/L	2 Times per Week	8-hr Composite	Jan-Dec
Oil and grease Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	****	15 Monthly Average	20 Daily Maximum	mg/L	2 Times per Week	Grab Sampling	Jan-Dec
pH Effluent	****	****	****	6.0 Minimum	****	9.0 Maximum	SU	2 Times per Week	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	*****	30 Monthly Average	100 Daily Maximum	mg/L	2 Times per Week	8-hr Composite	Jan-Dec

Subject Item: Outfall 009 (Internal Outfall - Low Volume Wastewater From The Demineralizer)

RPNT000000000013: MSR0002381-009

				Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	*****	****	****	****	Twice per Month	Pump Log	Jan-Dec
Oil and grease Effluent	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	15 Monthly Average	20 Monthly Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
pH Effluent	****	****	*****	6.0 Minimum	****	9.0 Maximum	SU	Twice per Month	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	Report Monthly Average	Report Monthly Maximum	pounds per day	*****	30 Monthly Average	100 Monthly Maximum	mg/L	Twice per Month	8-hr Composite	Jan-Dec

Subject Item: Outfall 010 (Cooling Lake System Discharge)
RPNT000000000014: MSR0002381-010

				Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorine, total residual Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	*****	0.011 Monthly Average	0.019 Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
Flow Effluent	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	****	****	*****	****	See Permit	Instantaneous Sampling	Jan-Dec
pH Effluent	****	*****	*****	6.0 Minimum	****	9.0 Maximum	SU	See Permit	Grab Sampling	Jan-Dec
Temperature (Deg. F) Effluent	*****	*****	*****	*****	Report Monthly Average	90 Daily Maximum	degrees F	See Permit	Grab Sampling	Jan-Dec

Subject Item: Outfall 011 (Cooling Lake System Discharge)
RPNT000000000015: MSR0002381-011

				Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorine, total residual Effluent	Report Monthly Average	Report Daily Maximum	pounds per day	*****	0.011 Monthly Average	0.019 Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
Flow Effluent	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	****	See Permit	Instantaneous Sampling	Jan-Dec
pH Effluent	****	*****	*****	6.0 Minimum	****	9.0 Maximum	SU	See Permit	Grab Sampling	Jan-Dec
Temperature (Deg. F) Effluent	*****	*****	****	*****	Report Monthly Average	90 Daily Maximum	degrees F	See Permit	Grab Sampling	Jan-Dec

Entergy Mississippi Inc, Rex Brown Plant

Facility Requirements
Permit Number: MS0002381
Activity ID No.:PER20130001

Page 1 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

# **Limitation Requirements:**

Condition		
No.	Parameter	Condition
L-1		There shall be no discharge of floating solids or visible foam in other than trace amounts. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]
L-2		Site Specific Requirement
		There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. [40 CFR 423.13.(a)]
L-3		The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [11 Miss. Admin. Code Pt. 6, R. 2.2.A(2).]
L-4		Samples taken in compliance with the monitoring requirements specified in this permit shall be taken at the nearest accessible point after final treatment but prior to mixing with the receiving stream or as otherwise specified in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 2 of 34

#### AI0000002286 (2286) Steam Electric Power Plant:

## **Monitoring Requirements:**

Condition No.	Parameter	Condition		
M-1	1 W.		d helow should	be analyzed using the following methods or their approved equivalent
141-1		Samples for the parameters liste	d below should	be analyzed using the following methods of their approved equivalent
		Parameter	Method	Minimum Level
		Chromium, Total Recoverable	200.8	0.5 micrograms/L
		Copper, Total Recoverable	200.8	0.5 micrograms/L
		Lead, Total Recoverable	200.8	0.5 micrograms/L
		Zinc, Total Recoverable	200.8	10 micrograms/L
		Total Mercury	1631E	0.5 nanograms/L
		Chlorine, Total Residual	SM 4500-CL	G 2000
		Chlorine, Free Available	SM 4500-Cl	L G 2000

At the permittee's option, alternative approved test methods as per Condition T-20 of page 11 of 35 may be substituted if the test detection levels are equal to or more sensitive that the above methods. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 3 of 34

#### AI0000002286 (2286) Steam Electric Power Plant:

# **Record-Keeping Requirements:**

Condition No.	Condition
R-1	Recording of Results
	For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall maintain records of all information obtained from such monitoring including:
	<ol> <li>(1) The exact place, date, and time of sampling;</li> <li>(2) The dates the analyses were performed;</li> <li>(3) The person(s) who performed the analyses;</li> <li>(4) The analytical techniques, procedures or methods used; and</li> <li>(5) The results of all required analyses. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]</li> </ol>

# **Submittal/Action Requirements:**

Condition No.	Condition
S-1	Reporting
	Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report (DMR). DMR data must be submitted submitted electronically using the MDEQ NetDMR system NO LATER THAT THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD.
	DMRs and all other reports required herein, shall be signed in accordance with 11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(1). of the Mississippi Wastewater Regulations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)c(1)., 40 CFR 122.21(1)(4)(i)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 4 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

# **Submittal/Action Requirements:**

Condition No.	Condition
S-2	Reporting Requirements - Planned Changes
	The permittee shall give notice to the Permit Board as soon as possible of any planned physical alterations or additions, including but not limited to, a change of operation to the permitted facility. Notice is required in the circumstances that follow:  (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether the facility is a new source in 40 CFR 122.29(b); or  (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to either effluent limitations in the permit or notification requirements under 40 CFR 122.42(a)(1).  (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan; [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(a).]
S-3	Reporting Requirements - Anticipated Noncompliance
	The permittee shall give advance notice to the Permit Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(b).]

Entergy Mississippi Inc, Rex Brown Plant **Facility Requirements** Permit Number: MS0002381 Activity ID No.:PER20130001

Page 5 of 34

#### AI0000002286 (2286) Steam Electric Power Plant:

## **Submittal/Action Requirements:**

Condition No.	Condition
S-4	Noncompliance Notification - Twenty-Four Hour Reporting
	(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance.
	<ul> <li>(2) The following shall be included as information which must be reported within 24 hours under this paragraph.</li> <li>(i) Any unanticipated bypass which exceeds any effluent limitation in the permit.</li> <li>(ii) Any upset which exceeds any effluent limitation in the permit.</li> <li>(iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Permit Board in the permit to be reported within 24 hours.</li> <li>(iv) The Executive Director may waive the written report on a case-by-case basis for reports under paragraph (1) of this section if the oral report has been received within 24 hours.</li> </ul>
	All reports required by this condition which are submitted after December 20, 2020, shall be submitted by the permittee electronically as instructed by MDEQ. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(e)., 40 CFR 122.41.(1)(6)]
S-5	Noncompliance Notification - Other Noncompliance
	The permittee shall report all instances of noncompliance not reported under the twenty-four hour reporting requirements, at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the same information as is required under the twenty-four

hour reporting requirements contained in this permit.

All reports required by this condition which are submitted after December 20, 2020, shall be submitted by the permittee electronically as instructed by MDEQ. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(f)., 40 CFR 122.41.(1)(7)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 6 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

# **Submittal/Action Requirements:**

Condition No.	Condition
S-6	Noncompliance Notification - Other Information
	Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permit Board, it shall promptly submit such facts or information. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(g).]
S-7	Bypassing -Notice
	Anticipated bypass- If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
	Unanticipated bypass- The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit.
	All reports required by this condition which are submitted after December 20, 2020, shall be submitted by the permittee electronically as instructed by MDEQ. [40 CFR 122.41(m)(3)(i, ii)]
S-8	Expiration of Permit
	At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.B(1).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 7 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

# **Submittal/Action Requirements:**

Condition No.	Condition
S-9 Requirements Regarding Cooling and Boiler Water Additives	
	Notification shall be made to the permitting authority in writing not later than sixty (60) days prior to initiating the addition of any chemical product to the cooling water and/or boiler water which is subject to discharge, other than those previously approved and/or used. Such notification should include, but not be limited to:
	<ol> <li>(1) Name and composition of the proposed additive,</li> <li>(2) Proposed discharge concentration,</li> <li>(3) Dosage addition rates,</li> <li>(4) Frequency of use,</li> <li>(5) EPA registration, if applicable, and</li> <li>(6) Aquatic species toxicological data.</li> </ol>
	Written approval must be received from the permitting authority prior to initiating use. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(14).]
S-10	316(b) Application Requirements:
	The permittee shall submit the information required by 40 CFR 122.21(r) at least 180 days prior to the expiration date of the permit. [40 CFR 122.21.(d), 40 CFR 122.21.(r)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 8 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

# **Narrative Requirements:**

# **Definitions:**

Condition No.	Condition
T-1	Definitions: General
	The permittee shall refer to 11 Miss. Admin. Code Pt. 6, R. 1.1.1.A for definitions of any permit term not specified in this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A.]
T-2	Definitions: Monthly Average
	"Monthly Average" means the average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during the month. The monthly average for E coli bacteria is the geometric mean of "daily discharges" measured during the calendar month. In computing the geometric mean for E coli bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(44).]
T-3	Definitions: Daily Discharge
	"Daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(15).]
T-4	Definitions: Daily Maximum
	"Daily maximum" means the highest "daily discharge" over a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(16).]
T-5	Definitions: Toxic Pollutants
	"Toxic pollutants" means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the Clean Water Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(71).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 9 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-6	Definitions: Hazardous Substances
	"Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]
T-7	Definitions: Quarterly Average
	"Quarterly Average" means the average of "daily discharges" over a three month period, calculated as the sum of all "daily discharges" measured during the quarter divided by the number of "daily discharges" measured during the quarter. The quarterly average for E coli bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for E coli bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(61).]
T-8	Definitions: Weekly Average
	"Weekly average" means the average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. The weekly average for E coli bacteria is the geometric mean of all "daily discharges" measured in a calendar week. In computing the geometric mean for E coli bacteria, one (1) shall be substituted for sample results of zero. For self-monitoring purposes, the value to be reported is the single highest weekly average computed during a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(86).]
T-9	Definitions: Maximum Monthly Average
	Maximum Monthly Average means the highest "monthly average" over a monitoring period. [40 CFR 122]
T-10	Definitions: Quarterly Maximum
	"Quarterly Maximum" means the highest "daily discharge" measured over a three-month period. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(62).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 10 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-11	Definitions: Yearly Average
	"Yearly Average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly average for E coli bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for E coli bacteria, the value one (1) shall be substituted for sample results of zero. [11 Miss. Admin. Code Pt. 6, R.1.1.1.A(87).]
T-12	Definitions: Yearly Maximum
	"Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(88).]
T-13	Definitions: "Submitted" means the document is postmarked on or before the applicable deadline, except as otherwise specified. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A (67).]
Condition No.	Condition
T-14	The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule: Upon Permit Issuance. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(9).)]
T-15	Within 14 days after either an interim or final date of compliance specified by this permit, the permittee shall provide the Permit Board with written notice of his compliance or noncompliance with the requirements or conditions specified to be completed by that date. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(10).]
T-16	Representative Sampling
	Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)(e).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 11 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition	
No.	Condition
T-17	Reporting
	If the results for a given sample analysis are such that any parameter (other than E coli) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI = B" on the DMR. For E coli, a value of 1.0 shall be used in calculating the geometric mean. If the resulting E coli mean value is 1.0, the permittee shall report "NODI = B" on the DMR. For each quantitative sample value that is not detectable, the test method used and the minimum level for that method for that parameter shall be attached to and submitted with the DMR. The permittee shall then be considered in compliance with the appropriate effluent limitation and/or reporting requirement. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 2.]
T-18	Reporting
	If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(2).]
T-19	Reporting
	Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)(3).]
T-20	Test Procedures
	Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(30).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 12 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-21	Records Retention
	All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]
T-22	Falsifying Reports
	Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(d).]
T-23	Facility Expansion and/or Modification
	Any facility expansion, production increases, process modifications, changes in discharge volume or location or other changes in operations or conditions of the permittee which may result in a new or increased discharge of waste, shall be reported to the Permit Board by submission of a new application for a permit pursuant to 11 Miss. Admin. Code Pt. 6, R. 1.1.2.A.of the Mississippi Wastewater Regulations, or if the discharge does not violate effluent limitations specified in the permit, by submitting to the Permit Board a notice of a new or increased discharge. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.A.]
T-24	Duty to Comply
	The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(2).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 13 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition	
No.	Condition
T-25	Proper Operation, Maintenance and Replacement
	The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(18).]
T-26	Duty to Mitigate
	The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(19).)]
T-27	Bypassing
	The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]
T-28	Bypassing - Definitions
	"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
	"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)]
T-29	Bypassing - Bypass not exceeding limitations
	The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the notice and prohibition provisions of the bypass requirements in this permit. [40 CFR 122.41(m)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 14 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-30	Bypassing- Prohibition of Bypass
	<ol> <li>Bypass is prohibited, and the Commission may take enforcement action against a permittee unless:</li> <li>Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage.</li> <li>There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and</li> <li>The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.</li> </ol>
	(2) The Commission may approve an anticipated bypass, after considering its adverse affects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. [40 CFR 122.41(m)]
T-31	Upsets
	The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as in the upset requirements of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]
T-32	Upsets- Definition
	"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]
T-33	Upsets - Effect of an Upset
	An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the "conditions necessary for demonstration of upset" requirements of this permit are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review. [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 15 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-34	Upsets - Conditions necessary for demonstration of upset
	A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
	<ol> <li>(1) An upset occurred and that the permittee can identify the cause(s) of the upset;</li> <li>(2) The permitted facility was at the time being properly operated;</li> <li>(3) The permittee submitted notice of the upset as required in 40 CFR 122.41(L)(6)(ii)(B)(24-hour notice of noncompliance); and</li> <li>(4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate). [11 Miss. Admin. Code Pt. 6, R.1.1.4.A(27).]</li> </ol>
T-35	Upsets - Burden of proof
	In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(27).]
T-36	Removed Substances
	Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(21).]
T-37	Power Failures
	If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:
	(1) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit, (2) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(22).)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 16 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition	
T-38	Inspection and Entry	
	The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(17).]	
T-39	Transfer of Ownership or Control	
T-40	This permit is not transferable to any person without proper modification of this permit following procedures found in [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C.] Signatory Requirements	
	All applications, reports, or information submitted to the Permit Board shall be signed and certified. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]	

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 17 of 34

#### AI0000002286 (2286) Steam Electric Power Plant:

# **Narrative Requirements:**

Narrauv	Narrative Requirements:	
Condition No.	Condition	
T-41	Signatory Requirements - Application Signatures	
	All permit applications shall be signed as follows:	
	(1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (i) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making function for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.	
	(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or	
T-42	(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.] Signatory Requirements -Reports and Other Information	
	All reports required by the permit and other information requested by the Permit Board shall be signed by a person described by the application signature requirements in this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:	
	(1) The authorization is made in writing by a person described by the application signature requirements; (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position having overall responsibility for environmental matters for the company. (A duly authorized	

representative may thus be either a named individual or any individual occupying a named position.); and (3) The written authorization is submitted to the Permit Board. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 18 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition			
No.	Condition		
T-43	Signatory Requirements - Changes to Authorization		
	If an authorization under the signatory requirements of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the signatory requirements of this permit must be submitted to the Permit Board prior to or together with any reports, information, or applications. [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]		
T-44	Signatory Requirements - Certification		
	Any person signing a document under the signatory requirements stated in this permit shall make the following certification:		
	"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [11 Miss. Admin. Code Pt. 6, R. 1.1.2.C.]		
T-45	Availability of Records  Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review and copying requirements. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.E.]		
T-46	Duty to Provide Information		
	The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(16).]		

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 19 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-47	Toxic Pollutants
	The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).]
T-48	Toxic Pollutants Notification Requirements
	The permittee shall comply with the applicable provisions of 40 CFR 122.42. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(26).]
T-49	Civil and Criminal Liability
	(1) Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.  (2) Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.  (3) It shall not be the defense of the 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. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(24).)]
T-50	Oil and Hazardous Substance Liability
	Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 of the Federal Water Pollution Control Act and applicable provisions under Mississippi Law pertaining to transportation, storage, treatment, or spillage of oil or hazardous substances. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(23).]
T-51	Property Rights
	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. [11 Miss. Admin. Code Pt. 6, R. 1.1.5. E.]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 20 of 34

### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-52	Severability
	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. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(25).]
T-53	Protection of Confidential Information
	(1) Pursuant to Miss. Code Ann. '49-17-39 and 40 CFR 123.41, the Permit Board shall make available to the public all information contained on any form and all public comments on such information. Effluent data and information concerning air or water quality shall also be made available to the public. Information that is determined by the Commission to be trade secrets shall not be disclosed to the public without prior consent of the source of such information. When a claim of confidentiality is made by a person in accordance with the provisions of Miss. Code Ann. '49-17-39, a recommendation on the questions of confidentiality shall be made by the Commission and forwarded to the Regional Administrator (or his/her designee) of EPA for his concurrence in such determination of confidentiality. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]
T-54	Protection of Confidential Information- continued
	(2) A copy of a State, UIC, or NPDES permit application, public notice, fact sheet, draft permit and other forms relating thereto, including written public comment and other reports, files and information relating to the application not classified as confidential information by the Commission pursuant to part (1) of this requirement, shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 21 of 34

#### AI0000002286 (2286) Steam Electric Power Plant:

Condition
Protection of Confidential Information- continued
(3) Upon determination by the Commission that information submitted by a permit applicant is entitled to protection against disclosure as trade secrets, the information shall be so labeled and otherwise handled as confidential. Copies of the information and a notice of the Commission's action shall be forwarded to the Regional Administrator (or his/her designee). In making its determination of entitlement to protection as a trade secret, the Commission shall follow the procedure set forth in Miss. Code Ann. ' 49-17-39. In the event the Commission denies the claim of confidentiality, the applicant shall have, upon notification thereof, the right to appeal the Commission's determination in the same manner provided for other orders of the Commission. No disclosure, except to EPA, shall be allowed until any appeal from the determination of the Commission is completed. [11 Miss. Admin. Code Pt. 6, R. 1.1.3.F.]
Spill Prevention and Best Management Plans
Any permittee which has above ground bulk storage capacity, of more than 1320 gallons or any single container with a capacity greater than 660 gallons, of materials and/or liquids (including but not limited to, all raw, finished and/or waste material) with chronic or acute potential for pollution impact on waters of the State and not subject to Mississippi Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations shall provide secondary containment as found in 40 CFR 112 or equivalent protective measures such as trenches or waterways which would conduct any tank releases to a permitted treatment system or sufficient equalization or treatment capacity needed to prevent chronic/acute pollution impact. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(12)(a).]
Reopener Clause
This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved:

- 1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- 2. Controls any pollutant not limited in the permit.
- 3. This permit shall be modified to reflect any additional or otherwise more stringent limitations and additional monitoring as determined to be necessary by the results of a Completed TMDL. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.F(1).]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 22 of 34

#### AI0000002286 (2286) Steam Electric Power Plant:

Condition No.	Condition
T-58	Closure Requirements
	Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(11).]
T-59	Permit Actions
	The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition. [11 Miss. Admin. Code Pt. 6, R. 1.1.5.C(5).]
T-60	The current technology of closed-cycle cooling is being accepted as interim Best Technology Available (BTA). [40 CFR 125.98.(b)(6)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 23 of 34

#### RPNT000000007 (MSR0002381-001) Outfall 001 (Low Volume Wastewater and Boiler Blowndown From Unit 3):

# **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The discharge from the outfall shall not cause the temperature of the receiving stream to be raised more than 5 degrees Fahrenheit above natural condition temperatures. [11 Miss. Admin. Code Pt. 6, R. 2.2.E]

# **Submittal/Action Requirements:**

Condition No.	Condition
S-1 Notification of Discharge:	
	The permittee shall provide notification of a discharge of Outfall 003 to Eubanks Creek. A written and oral notification shall be provided within 48 hours following the commencement of discharge and should include the exact date and time the discharge began and the anticipated time the discharge is expected to continue. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
S-2	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)c]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 24 of 34

#### RPNT000000007 (MSR0002381-001) Outfall 001 (Low Volume Wastewater and Boiler Blowndown From Unit 3):

Condition No.	Condition
T-1	The parameter listed below shall be monitored twice per week when discharging to Eubanks Creek until 12 samples have been collected. Once the data is collected, the permittee shall submit a report summarizing the results of each sampling event. The reports shall be submitted to the MDEQ to the attention of the Environmental Permits Division (EPD) on the 28th day of the month following the completion of the effluent sampling. Based on the effluent monitoring results, the permit may be modified to reflect any additional or more stringent limitations and monitoring requirements.
	Parameter
	Copper, Total Recoverable Lead, Total Recoverable
	When the effluent is recycled into the cooling pond, monitoring for above parameters is waived. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
T-2	The effluent monitoring requirements for this outfall are waived during times when the effluent enters the Cooling Lake System for recirculation. The permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the discharge monitoring report (DMR) for flow, oil and grease, pH, total suspended solids, temperature, total recoverable copper, and total recoverable lead. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 25 of 34

#### RPNT000000009 (MSR0002381-003) Outfall 003 (Low Volume Wastewater and Boiler Blowdown From Units 1 and 4):

### **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The discharge from the outfall shall not cause the temperature of the receiving stream to be raised more than 5 degrees Fahrenheit above natural condition temperatures. [11 Miss. Admin. Code Pt. 6, R. 2.2.E]

Condition No.	Condition	
S-1	Notification of Discharge:	
	The permittee shall provide notification of a discharge of Outfall 003 to Town Creek. A written and oral notification shall be provided within 48 hours following the commencement of discharge and should include the exact date and time the discharge began and the anticipated time the discharge is expected to continue. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]	
S-2	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]	

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 26 of 34

#### RPNT000000009 (MSR0002381-003) Outfall 003 (Low Volume Wastewater and Boiler Blowdown From Units 1 and 4):

### **Narrative Requirements:**

Condition No.	Condition
T-1 The parameters listed below shall be monitored twice per week when discharging to Town Creek until 12 samples have been collected. Once the data permittee shall submit a report summarizing the results of each sampling event. The reports shall be submitted to the MDEQ to the attention of the En Permits Division (EPD) on the 28th day of the month following the completion of the effluent sampling. Based on the effluent monitoring results, the modified to reflect any additional or more stringent limitations and monitoring requirements.	
	Parameter
	Copper, Total Recoverable Lead, Total Recoverable
	When the effluent is recycled into the cooling pond, monitoring for above parameters is waived. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
T-2	The effluent monitoring requirement for this outfall are waived during times when the effluent enters the Cooling Lake System for recirculation. The permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the discharge monitoring report (DMR) for flow, oil and grease, pH, total suspended solids, total recoverable copper, and total recoverable lead. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 27 of 34

#### RPNT0000000010 (MSR0002381-004) Outfall 004 (Internal Outfall - Once Through Cooling Water From Units 3 and 4):

### **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day. [40 CFR 423.13.b(2)]

# **Monitoring Requirements:**

Condition	n	
No.	Parameter	Condition
M-1		Samples taken in compliance with the monitoring requirements specified for Outfall 004 shall be taken at the following location(s): the nearest accessible point following combination of all unit condensers. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
M-2		8 grab samples shall consist of one grab sample taken every fifteen minutes for the duration of the chlorination period. For reporting, Daily Average shall mean the average of all samples taken over the duration of the chlorination period. The term Daily Maximum shall mean an instantaneous maximum. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-3		Monitoring requirement for this outfall are waived during times when the effluent enters the Cooling Lake System for recirculation. The permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the discharge monitoring report (DMR) for flow, oil and grease, pH, and total suspended solids. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
M-4		Chlorine testing is required only when chlorine is being utilized and/or present in the wastewater. If chlorination is not employed, the permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the monthly discharge monitoring report for the aforementioned parameter. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 28 of 34

#### RPNT0000000010 (MSR0002381-004) Outfall 004 (Internal Outfall - Once Through Cooling Water From Units 3 and 4):

Condition No.	Condition
S-1	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 29 of 34

#### RPNT0000000011 (MSR0002381-006) Outfall 006 (Cooling Tower Blowdown From Unit 1):

### **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in the plant may discharge free available or total residual chlorine at any one time. [40 CFR 423.15.d(2)]

# **Monitoring Requirements:**

Conditio No.	n Parameter	Condition
M-1		8 grab samples shall consist of one grab sample taken every fifteen minutes for the duration of the chlorination period. For reporting, Daily Average shall mean the average of all samples taken over the duration of the chlorination period. The term Daily Maximum shall mean an instantaneous maximum. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-2		Chlorine testing is required only when chlorine is being utilized and/or present in the wastewater. If chlorination is not employed, the permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the monthly discharge monitoring report for the aforementioned parameter. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
M-3		Total Residual Chlorine shall be non-detectable at a quantification level of 0.10 mg/l. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 30 of 34

#### RPNT0000000011 (MSR0002381-006) Outfall 006 (Cooling Tower Blowdown From Unit 1):

### **Submittal/Action Requirements:**

Condition No.	Condition
S-1	Compliance Demonstration Requirements for 40CFR423.13(d)(1)
	The permittee shall, not less than once per year, (due on January 28th of each year), certify that chemicals added for cooling tower maintenance, including such chemicals used for corrosion inhibition, do not result in the discharge via cooling tower blowdown of any of the 126 priority pollutants (excluding chromium and zinc) in detectable concentrations. Additionally, once for each product used for cooling tower maintenance (unless subsequent changes in the product formulation occur or, the product is obtained from a different source), compliance shall be demonstrated by submission of certification from the manufacturer that such product contains no priority pollutants or, if any of the 126 priority pollutants are contained in such product, calculations which show that the addition of such product does not result in the discharge of that individual priority pollutant at concentrations greater than 10 micrograms per liter due to dilution within the cooling system. Submit a certification: Due annually by the 28th of January. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
S-2	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)]

### **Narrative Requirements:**

### **Chlorination Duration:**

Condition	
No.	Condition
T-1	Chlorination Duration: If the permittee does not utilize/add chlorine to treat their source water for their wastewater, the permittee shall indicate conditional monitoring
	(not required this period) by including the No Data Indicator Code (NODI) = 9 on the discharge monitoring report, [11 Miss, Admin, Code Pt. 6, Ch. 1, Subch. 1,]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 31 of 34

#### RPNT0000000012 (MSR0002381-008) Outfall 008 (Low Volume Wastewater):

### **Submittal/Action Requirements:**

Condition No.	Condition
S-1	Notification of Discharge:
	The permittee shall provide notification of a discharge of Outfall 008 to Town Creek. A written and oral notification shall be provided within 48 hours following the commencement of discharge and should include the exact date and time the discharge began and the anticipated length of time the discharge is expected to continue. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
S-2	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)]

# **Narrative Requirements:**

Condition No.	Condition
T-1	The effluent monitoring requirement for this outfall are waived during times when the effluent enters the Cooling Lake System for recirculation. The permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the discharge monitoring report (DMR) for flow, oil and grease, pH, total suspended solids, total recoverable copper, and total recoverable lead. [11 Miss. Admin. Code Pt. 6. Ch. 1. 1.1.1.A(15)c]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 32 of 34

#### RPNT0000000013 (MSR0002381-009) Outfall 009 (Internal Outfall - Low Volume Wastewater From The Demineralizer):

### **Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		Monitoring requirement for this outfall are waived during times when the effluent enters the Cooling Lake System for recirculation. The permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator (NODI)=9 on the discharge monitoring report (DMR) for flow, oil and grease, pH, and total suspended solids. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]
M-2		Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): the nearest accessible point following discharge when the effluent does not enter the Cooling Lake System for recirculation. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Condition No.	Condition
S-1	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 33 of 34

#### RPNT000000014 (MSR0002381-010) Outfall 010 (Cooling Lake System Discharge):

### **Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The discharge from Outfall 010 shall not raise the temperature of the receiving stream more than 5 degrees Fahrenheit above natural temperatures. [11 Miss. Admin. Code Pt. 6, R. 2.2.E]

### **Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		Monitoring shall be performed once per day during any period of discharge. Monitoring may be reduced to once per week if a discharge continues longer than five (5) days. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-2		Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): the nearest accessible and feasible point of the spillway prior to entering or mixing with the receiving waters. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Condition No.	Condition
S-1	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)(c)]

Entergy Mississippi Inc, Rex Brown Plant Facility Requirements Permit Number: MS0002381 Activity ID No.:PER20130001

Page 34 of 34

#### **RPNT0000000015 (MSR0002381-011) Outfall 011 (Cooling Lake System Discharge):**

### **Limitation Requirements:**

Condition No.	Parameter	Condition	
L-1		The discharge from Outfall 011 shall not raise the temperature of the receiving stream more than 5 degrees Fahrenheit above natural temperatures. [11 Miss. Admin. Code Pt. 6, R. 2.2.E]	

### **Monitoring Requirements:**

Condition No.	on Parameter	Condition
M-1		Total Residual Chlorine shall be non-detectable at a quantification level of 0.10 mg/l. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-2		Monitoring shall be performed once per day during any period of discharge. Monitoring may be reduced to once per week if a discharge continues longer than five (5) days. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-3		Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): the nearest accessible and feasible point of the spillway prior to entering or mixing with the receiving waters. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1.]

Condition No.	Condition
S-1	The Permittee shall submit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(15)c]

### **GENERAL INFORMATION**

Entergy Mississippi Inc, Rex Brown Plant 1960 West Northside Drive Jackson, MS Hinds County

### **Alternate/Historic Identifiers**

ID	Alternate/Historic Name	User Group	Start Date	End Date
2286	Entergy Mississippi, Inc.	Official Site Name	02/12/1991	
2804900112	Entergy Mississippi Inc, Rex Brown Plant	Air-AIRS AFS	10/12/2000	
MSD991277062	Entergy Mississippi Inc, Rex Brown Plant	Hazardous Waste-EPA ID	07/11/1996	
108000112	Entergy Mississippi Inc, Rex Brown Plant	Air-Title V Operating	09/12/1997	09/01/2002
MSR001190	Entergy Mississippi Inc, Rex Brown Plant	GP-Baseline	04/12/1995	11/02/2000
MS0002381	Entergy Mississippi Inc, Rex Brown Plant	Water - NPDES	02/12/1991	02/11/1996
MSR001190	Entergy Mississippi Inc, Rex Brown Plant	GP-Baseline	11/02/2000	01/10/2006
MS0002381	Entergy Mississippi Inc, Rex Brown Plant	Water - NPDES	04/25/2003	03/31/2008
108000112	Entergy Mississippi Inc, Rex Brown Plant	Air-Title V Operating	01/07/2005	01/06/2010
108000112	Plant Rex Brown	Air-Acid Rain	01/07/2005	01/06/2010
MSR001190	Entergy Mississippi Inc, Rex Brown Plant	GP-Baseline	01/10/2006	09/30/2010
108000112	Entergy Mississippi Inc, Rex Brown Plant	Air-Title V Fee Customer	09/12/1997	
2286	Entergy Mississippi Inc Rex Brown Plant	Air-Notification	04/03/2008	
MS0002381	Entergy Mississippi Inc, Rex Brown Plant	Water - NPDES	08/14/2008	07/31/2013
2286 001	Associated Natural Gas Inc, Rex Brown Plant	GARD	03/20/1995	
2286 001	Mississippi Power and Light Rex Brown Steam	GARD	03/21/1984	
2286	Rex Brown Plant Annual	Air-Notification	12/12/2008	
2286	Entergy Mississippi Inc, Rex Brown Plant	Air-Notification	03/17/2009	
2286	Entergy Mississippi Inc, Rex Brown Plant	Air-Notification	10/19/2009	
2286	Rex Brown Plant Contractor Building Trailer	Air-Notification	11/04/2009	
2286	Rex Brown Steam Electric Station	Air-Notification	12/15/2009	
108000112	Entergy Mississippi, Inc., Rex Brown Plant	Air-Title V Operating	07/07/2010	06/30/2015
2053	Entergy Mississippi Inc, Rex Brown Plant	Air: ORIS ID	10/26/2010	
2286	Annual	Air-Notification	12/15/2010	
MSR001190	Entergy Mississippi Inc, Rex Brown Plant	GP-Baseline	02/25/2011	09/28/2015

### **GENERAL INFORMATION**

2286	Rex Brown Unit 4	Air-Notification	09/27/2011	
2286	Annual Rex Brown Plant	Air-Notification	12/08/2011	
2286	Rex Brown Steam Electric station	Air-Notification	10/25/2012	
2286	Rex Brown Steam Electric Station	Air-Notification	11/26/2012	
2286	Annual	Air-Notification	12/03/2012	
2286	Rex Brown Steam Electric Station	Air-Notification	08/27/2013	
2286	Rex Brown Plant Annual notification	Air-Notification	12/02/2013	
2286	Rex Brown Unit # 4 boiler and exhaust stack	Air-Notification	02/27/2014	
2286	Entergy Mississippi Inc, Rex Brown Plant Annual	Air-Notification	12/05/2014	
2286	Entergy Mississippi Rex Brown Plant Unit 4	Air-Notification	01/22/2015	
2286	Entergy Mississippi Inc, Rex Brown Plant Annual	Air-Notification	12/09/2015	
MSR001190	Entergy Mississippi Inc, Rex Brown Plant	GP-Baseline	03/21/2016	10/31/2020
2286	Annual	Air-Notification	12/08/2016	
	Branch	Branches Group - Air	07/18/2017	
	Branch	Branches Group - Water	07/18/2017	
	Branch	Branches Group - Stormwater-401	07/18/2017	
	Branch	Branches Group - Hazardous Waste	08/04/2017	
2286	Entergy Mississippi Rex Brown	Air-Notification	10/16/2017	

**Basin:** Pearl River Basin

**Location Description:** 

PG- Plant Entrance (General). Data collected by Nameh Salem on 10/7/2005. Elevation 380 feet. EPE 25'. PG- Plant Entrance (General). Data collected by Mike Hardy on 10/26/2005. Elevation 385 feet.