



Entergy Operations, Inc.
P. O. Box 756
Port Gibson, MS 39150

Eric A. Larson
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Grand Gulf Nuclear Station
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GNRO-2019/00043

October 10, 2019

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Grand Gulf Nuclear Station National Pollutant Discharge Elimination
System NPDES Permit
Grand Gulf Nuclear Station, Unit 1
Docket No. 50-416
License No. NPF-29

Dear Sir or Madam:

Attached is the Grand Gulf Nuclear Station National Pollutant Discharge Elimination System NPDES Permit approved on July 2, 2019. This report is submitted in accordance with the requirements of the GGNS Unit 1 Operating License Environmental Protection Plan.

This letter contains no new commitments. If you have any questions or require additional information, please contact Kevin Sanders at 601-437-1426.

Sincerely,

A handwritten signature in black ink, appearing to read "E. A. Larson", with a long horizontal stroke extending to the right.

Eric A. Larson

EAL/dre

Attachment: Grand Gulf Nuclear Station National Pollutant Discharge Elimination System NPDES Permit approved on July 2, 2019

cc: see next page

cc: U.S. Nuclear Regulatory Commission
ATTN: Mr. Siva Lingam
Mail Stop OWFN 8 B1
Rockville, MD 20852-2738

NRC Senior Resident Inspector
Grand Gulf Nuclear Station
Port Gibson, MS 39150

U. S. Nuclear Regulatory Commission
Region Administrator, Region IV
Mail Stop OWFN 8 B1
Washington, DC 20555-0001

Director, Division of Radiological Health
Mississippi State Department of Health
Division of Radiological Health
3150 Lawson Street
Jackson, MS 39213

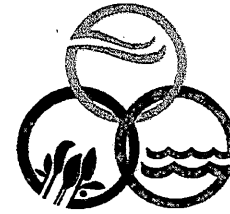
Attachment 1

Grand Gulf Nuclear Station National Pollutant Discharge Elimination System NPDES Permit
approved on July 2, 2019



State of Mississippi

WATER POLLUTION CONTROL PERMIT



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

THIS CERTIFIES

Entergy Mississippi Inc, Grand Gulf Nuclear Station
7003 Bald Hill Road
Port Gibson, MS
Claiborne 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

A handwritten signature in cursive script, reading "Krystal P. Lopez", written over a horizontal line.

Mississippi Department of Environmental Quality

Issued/Modified: JUL 02 2019

Expires: JUN 30 2024

Permit No.

MS0029521

Agency Interest # 2082

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

Entergy Mississippi Inc, Grand Gulf Nuclear Station

Subject Item Inventory

Permit Number: MS0029521

Activity ID No.: PER20160001

Subject Item Inventory:

ID	Designation	Description
AI2082		Nuclear Power Generation Facility
RPNT1	MS0029521-001	Outfall 001 (Discharge/Mixing Basin discharge. Effluent consists of wastewater from the internal Outfalls 002, 004, 005, 006, and 011 and discharges to the Mississippi River) - EXTERNAL
RPNT2	MS0029521-002	Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown) - INTERNAL
RPNT3	MS0029521-004	Outfall 004 (Unit A Standby Service Water Cooling Tower Blowdown) - INTERNAL
RPNT4	MS0029521-005	Outfall 005 (Unit B Standby Service Water Cooling Tower Blowdown) - INTERNAL
RPNT5	MS0029521-006	Outfall 006 (Treated low volume wastes consisting of demineralizer wastewater, carbon filter backwash, and Water Treatment Building sump wastewater) - INTERNAL
RPNT6	MS0029521-007	Outfall 007 (Low volume waste discharge consisting of miscellaneous wastewaters discharged into Sediment Basin B. The wastewater is comprised of Administrative Building drains, yard and storm drains, fire water pump house, oily waste sumps, ionics reject water, Turbine Building cooling water blowdown, HVAC cooling tower wastewater, HVAC once-through cooling, outage air compressor once-through cooling, intermittent standby service water, plant service water leakage and small releases) - INTERNAL
RPNT7	MS0029521-010	Outfall 010 (Total facility treated sanitary wastewater discharged to Basin A) - INTERNAL
RPNT8	MS0029521-011	Outfall 011 (Low Volume Wastes discharge consisting of ion exchange wastewater from the liquid radwaste treatment system, floor drains, and lab drains) - INTERNAL
RPNT9	MS0029521-013	Outfall 013 (Treated effluent from Basin A that enters an Unnamed Tributary thence into Hamilton Lake. Contributing sources of wastewaters include stand by service water leakage, storm water runoff, and the combined discharge of Internal Outfalls 010 and 016)- EXTERNAL
RPNT10	MS0029521-014	Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake. Contributing wastewater sources include effluents from internal Outfall 007, and storm water runoff) - EXTERNAL
RPNT11	MS0029521-016	Outfall 016 (Low volume waste discharge consisting of miscellaneous wastewaters from the Energy Services Center inclusive of ECS water Softener back wash, HVAC cooling tower waste water, plant softener backwash, and storm water runoff) - INTERNAL

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

Entergy Mississippi Inc, Grand Gulf Nuclear Station

Subject Item Inventory

Permit Number: MS0029521

Activity ID No.: PER20160001

Receiving Stream Relationships:

Subject Item	Relationship	Receiving Stream
RPNT1 Outfall 001 (Discharge/Mixing Basin discharge. Effluent consists of wastewater from the internal Outfalls 002, 004, 005, 006, and 011 and discharges to the Mississippi River) - EXTERNAL	Discharges Into	Mississippi River
RPNT10 Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake. Contributing wastewater sources include effluents from internal Outfall 007, standby service water leakage, intermittent circulating water basin overflows, and storm water runoff) - EXTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton
RPNT11 Outfall 016 (Low volume waste discharge consisting of miscellaneous wastewaters from the Energy Services Center inclusive of ECS water Softener back wash, HVAC cooling tower waste water, plant softener backwash, and storm water runoff) - INTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton
RPNT2 Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown) - INTERNAL	Discharges Into	Mississippi River
RPNT3 Outfall 004 (Unit A Standby Service Water Cooling Tower Blowdown) - INTERNAL	Discharges Into	Mississippi River
RPNT4 Outfall 005 (Unit B Standby Service Water Cooling Tower Blowdown) - INTERNAL	Discharges Into	Mississippi River
RPNT5 Outfall 006 (Treated low volume wastes consisting of demineralizer wastewater, carbon filter backwash, and Water Treatment Building sump wastewater) - INTERNAL	Discharges Into	Mississippi River
RPNT6 Outfall 007 (Low volume waste discharge consisting of miscellaneous wastewaters discharged into Sediment Basin B. The wastewater is comprised of Administrative Building drains, yard and storm drains, fire water pump house, oily waste sumps, ionics reject water, Turbine Building cooling water blowdown, HVAC cooling tower wastewater, HVAC once-through cooling, outage air compressor once-through cooling, intermittent standby service water, plant service water leakage and small releases) - INTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton
RPNT7 Outfall 010 (Total facility treated sanitary wastewater discharged to Basin A) - INTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton
RPNT8 Outfall 011 (Low Volume Wastes discharge consisting of ion exchange wastewater from the liquid radwaste treatment system, floor drains, and lab drains) - INTERNAL	Discharges Into	Mississippi River
RPNT9 Outfall 013 (Treated effluent from Basin A that enters an Unnamed Tributary thence into Hamilton Lake. Contributing sources of wastewaters include stand by service water leakage, storm water runoff, and the combined discharge of Internal Outfalls 010 and 016)- EXTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton

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

Entergy Mississippi Inc, Grand Gulf Nuclear Station

Subject Item Inventory

Permit Number: MS0029521

Activity ID No.: PER20160001

KEY

ACT = Activity

AREA = Area

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

RPNT = Release Point

WDPT = Withdrawal Point

AI = Agency Interest

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

PCS = PCS

TRMT = Treatment

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 001 (Discharge/Mixing Basin discharge. Effluent consists of wastewater from the internal Outfalls 002, 004, 005, 006, and 011 and discharges to the Mississippi River) - EXTERNAL
RPNT00000000001: MS0029521-001

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorination Duration Effluent</i>	*****	*****	*****	*****	*****	120 Daily Maximum	minutes	See Permit	Measurement	Jan-Dec
<i>Chlorine, free available Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.5 Daily Maximum	mg/L	See Permit	Check Requirements	Jan-Dec
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Continuously	Continuous Recorder	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Weekly	Grab Sampling	Jan-Dec
<i>Temperature (Deg. F) Effluent</i>	*****	*****	*****	*****	Report Monthly Average	Report Daily Maximum	degrees F	Continuously	Continuous Recorder	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown) - INTERNAL

RPNT00000000002: MS0029521-002

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorination Duration Effluent</i>	*****	*****	*****	*****	*****	120 Daily Maximum	minutes	Twice per Month	Measurement	Jan-Dec
<i>Chlorine, free available Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.5 Daily Maximum	mg/L	Continuously	Check Requirements	Jan-Dec
<i>Chromium (Total Recoverable) Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.2 Daily Maximum	mg/L	Twice per Month	24-hr Composite	Jan-Dec
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Twice per Month	Instantaneous Sampling	Jan-Dec
<i>Zinc (Total Recoverable) Effluent</i>	*****	*****	*****	*****	1.0 Monthly Average	1.0 Daily Maximum	mg/L	Twice per Month	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 004 (Unit A Standby Service Water Cooling Tower Blowdown) - INTERNAL
RPNT00000000003: MS0029521-004

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorination Duration Effluent</i>	*****	*****	*****	*****	*****	120 Daily Maximum	minutes	Once per Batch During Operation	Measurement	Jan-Dec
<i>Chlorine, free available Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.5 Daily Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec
<i>Chromium (Total Recoverable) Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.2 Daily Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Once per Batch During Operation	Instantaneous Sampling	Jan-Dec
<i>Zinc (Total Recoverable) Effluent</i>	*****	*****	*****	*****	1.0 Monthly Average	1.0 Daily Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 005 (Unit B Standby Service Water Cooling Tower Blowdown) - INTERNAL

RPNT0000000004: MS0029521-005

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorination Duration Effluent</i>	*****	*****	*****	*****	*****	120 Daily Maximum	minutes	Once per Batch During Operation	Measurement	Jan-Dec
<i>Chlorine, free available Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.5 Daily Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec
<i>Chromium (Total Recoverable) Effluent</i>	*****	*****	*****	*****	0.2 Monthly Average	0.2 Daily Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Once per Batch During Operation	Instantaneous Sampling	Jan-Dec
<i>Zinc (Total Recoverable) Effluent</i>	*****	*****	*****	*****	1.0 Monthly Average	1.0 Daily Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 006 (Treated low volume wastes consisting of demineralizer wastewater, carbon filter backwash, and Water Treatment Building sump wastewater) - INTERNAL
RPNT00000000005: MS0029521-006

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Once per Batch During Operation	Instantaneous Sampling	Jan-Dec
<i>Oil and grease Effluent</i>	*****	*****	*****	*****	15 Monthly Average	20 Daily Maximum	mg/L	Once per Batch During Operation	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	30 Monthly Average	100 Daily Maximum	mg/L	Once per Batch During Operation	Grab Sampling	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 007 (Low volume waste discharge consisting of miscellaneous wastewaters discharged into Sediment Basin B. The wastewater is comprised of Administrative Building drains, yard and storm drains, fire water pump house, oily waste sumps, ionics reject water, Turbine Building cooling water blowdown, HVAC cooling tower wastewater, HVAC once-through cooling, outage air compressor once-through cooling, intermittent standby service water, plant service water leakage and small releases) - INTERNAL
 RPNT00000000006: MS0029521-007

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorine, total residual Effluent</i>	*****	*****	*****	*****	Report Monthly Average	Report Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Twice per Month	Instantaneous Sampling	Jan-Dec
<i>Oil and grease Effluent</i>	*****	*****	*****	*****	15 Monthly Average	20 Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	30 Monthly Average	100 Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 010 (Total facility treated sanitary wastewater discharged to Basin A) - INTERNAL

RPNT00000000007: MS0029521-010

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorine, total residual Effluent</i>	*****	*****	*****	*****	Report Monthly Average	0.5 Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
<i>E coli Effluent</i>	*****	*****	*****	*****	126 Monthly Average	410 Daily Maximum	# of colonies/100 ml	Twice per Month	Grab Sampling	Nov-Apr
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Continuously	Continuous Recorder	Jan-Dec
<i>Oxygen Demand, biochemical, 5-day (20 degrees C) Effluent</i>	*****	*****	*****	*****	30 Monthly Average	45 Daily Maximum	mg/L	Twice per Month	24-hr Composite	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Twice per Month	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	30 Monthly Average	45 Daily Maximum	mg/L	Twice per Month	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 011 (Low Volume Wastes discharge consisting of ion exchange wastewater from the liquid radwaste treatment system, floor drains, and lab drains) - INTERNAL
RPNT000000000008: MS0029521-011

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Flow Effluent</i>	Report Monthly Average	Report Daily Maximum	Million Gallons per Day	*****	*****	*****	*****	Continuously	Pump Log	Jan-Dec
<i>Oil and grease Effluent</i>	*****	*****	*****	*****	15 Monthly Average	20 Daily Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	Report Monthly Average	30 Daily Maximum	mg/L	Monthly	Grab Sampling	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 013 (Treated effluent from Basin A that enters an Unnamed Tributary thence into Hamilton Lake. Contributing sources of wastewaters include stand by service water leakage, storm water runoff, and the combined discharge of Internal Outfalls 010 and 016)- EXTERNAL
RPNT00000000009: MS0029521-013

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Flow Effluent</i>	Report Annual Average	Report Annual Maximum	Million Gallons per Day	*****	*****	*****	*****	Quarterly	Instantaneous Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Quarterly	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	Report Annual Average	Report Annual Maximum	mg/L	Quarterly	Grab Sampling	Jan-Dec
<i>Zinc (Total Recoverable) Effluent</i>	*****	*****	*****	*****	Report Quarterly Average	0.065 Quarterly Maximum	mg/L	Monthly	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake.
Contributing wastewater sources include effluents from internal Outfall 007, and storm water runoff) -
EXTERNAL
RPNT000000000010: MS0029521-014

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Flow Effluent</i>	Report Annual Average	Report Annual Maximum	Million Gallons per Day	*****	*****	*****	*****	Quarterly	Instantaneous Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Quarterly	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	Report Annual Average	Report Annual Maximum	mg/L	Quarterly	Grab Sampling	Jan-Dec
<i>Zinc (Total Recoverable) Effluent</i>	*****	*****	*****	*****	Report Quarterly Average	0.065 Quarterly Maximum	mg/L	Monthly	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: Outfall 016 (Low volume waste discharge consisting of miscellaneous wastewaters from the Energy Services Center inclusive of ECS water Softener back wash, HVAC cooling tower waste water, plant softener backwash, and storm water runoff) - INTERNAL
 RPNT000000000011: MS0029521-016

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations							Monitoring Requirements		
	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
<i>Chlorine, total residual Effluent</i>	*****	*****	*****	*****	Report Annual Average	0.5 Annual Maximum	mg/L	Twice per Quarter	Grab Sampling	Jan-Dec
<i>Flow Effluent</i>	Report Annual Average	Report Annual Maximum	Million Gallons per Day	*****	*****	*****	*****	Twice per Quarter	Instantaneous Sampling	Jan-Dec
<i>Oil and grease Effluent</i>	*****	*****	*****	*****	15 Annual Average	20 Annual Maximum	mg/L	Twice per Quarter	Grab Sampling	Jan-Dec
<i>pH Effluent</i>	*****	*****	*****	6.0 Minimum	*****	9.0 Maximum	SU	Twice per Quarter	Grab Sampling	Jan-Dec
<i>Solids (Total Suspended) Effluent</i>	*****	*****	*****	*****	30 Annual Average	100 Annual Maximum	mg/L	Twice per Quarter	Grab Sampling	Jan-Dec

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

Entergy Mississippi Inc, Grand Gulf Nuclear Station

Facility Requirements

Permit Number: MS0029521

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AI0000002082 Nuclear Power Generation Facility:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Polychlorinated Biphenyls	<p>Polychlorinated Biphenyls: There shall be no discharge of polychlorinated byphenol compounds (PCB's) such as those commonly found in transformer fluid. In the event that PCB containing equipment is used on site, administrative procedures shall be instituted to:</p> <p>(1) Maintain a detailed inventory of PCB use; (2) Assure engineering design and construction to preclude release of PCB's to the environment; (3) Effectively detect the loss of PCB's from equipment. PCB containing equipment is any large volume containing vessels kept on site with the potential to pollute State Waters (i.e. transformers). [40 CFR 423.12.(b)(2)]</p>
L-2		<p>The discharge of blowdown from the cooling system shall be limited to the discharge of recirculating water necessary for the purpose of discharging materials contained in the process, the further build-up of which would cause concentrations or amounts exceeding limits established in this permit. Discharge temperatures shall not exceed the lowest temperature of the recirculating cooling water prior to the addition of make-up. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>

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AI0000002082 Nuclear Power Generation Facility:

Limitation Requirements:

Condition No.	Parameter	Condition
L-3		<p>Thermal Mixing Zone:</p> <p>The receiving water shall not exceed a maximum water temperature change of 2.8 degrees Celcius (5.0 degrees Fahrenheit) relative to the upriver temperature, outside a mixing zone not exceeding a maximum width of 60 feet from the river edge and a maximum length of 6,000 feet downstream from the point of discharge, as measured at a depth of 5 feet. The river edge shall be defined as being no further east than the mouth of the barge slip. The maximum water temperature shall not exceed 32.2 degrees Celcius (90 degrees Fahrenheit) outside the same mixing zone, except then ambient temperatures approach or exceed this value.</p> <p>Thermal Modeling:</p> <p>Thermal monitoring shall be performed any time the river stage is less than 0.5 feet (Vicksburg gauge) during winter months (November-April) or, is less than minus 1.2 feet (-1.2 ft) (Vicksburg gauge) during the summer months (May-October). If these conditions occur and the plant is generating power, monitoring shall be performed upriver at PT.1 (surface/5 feet sub-surface), Discharge Outlet, Barge Slip Outlet, and down river at PT.7.</p> <p>However, once monitoring has been performed at river stages less than those cited (0.5 feet during the winter months and minus 1.2 feet (-1.2 ft) during the summer months), the river stages which existed at the time of thermal modeling, will then become the standard river stage during which a subsequent monitoring exercise must be performed if the river falls below that stage. Thorough documentation shall be maintained on file of the river stage during each period of thermal monitoring. This policy is subject to modification if any data collected during a particular stage indicates temperature variations not previously measured. [WPC-1 Chapter One IV.A.28(a)]</p>
L-4		<p>Copies of any and all routine liquid effluent and water quality monitoring reports submitted to the Nuclear Regulatory Commission (NRC) shall be simultaneously submitted to the Mississippi Office of Pollution Control Permit Board and EPA. Copies of any routine and non-routine reports submitted to the Permit Board and EPA shall also be submitted tot he NRC when regarded necessary for their review. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>

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

Entergy Mississippi Inc, Grand Gulf Nuclear Station

Facility Requirements

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AI0000002082 Nuclear Power Generation Facility:

Limitation Requirements:

Condition No.	Parameter	Condition
L-5		Discharge of uncontaminated water including fire protection water, condensate from air conditioning equipment, cooling tower make-up bypasses, radial well direct discharges, uncontaminated secondary containment infiltration, domestic/construction water, and yard drains to the yard drainage system is permitted without limitation or monitoring requirements. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-6		Discharges resulting from outages or other maintenance activities resulting from the drainage of the Circulating Water System (CWS) and associated components shall meet monitoring requirements specified for Outfall 002. The permittee shall notify the Permit Board of such discharges no less than ten (10) days prior to the discharge. Bioassay results may be required if conditions warrant. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-7		System discharges during outages or other maintenance activities resulting from the drainage of the Standby Service Water System (SSW) and associated components shall meet the effluent limitations and monitoring requirements specified for Outfall 004 and Outfall 005. The permittee shall notify the Permit Board of such discharges no less than ten (10) days prior to the discharge. Bioassay results may be required if conditions warrant. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-8		Solid waste treatment sludge shall be disposed of in an approved manner. The handling, dewatering, storage, compaction and method of placement of this material shall be in accordance with Permit Board Requirements. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-9		Applicable administrative procedures regarding Radioactive Discharge Controls shall be followed in management of discharges from the Turbine Building Cooling Water System, which is disposed of through Outfall 007. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-10		There shall be no discharge of Metal Cleaning Wastewater. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-11		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-12		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).]

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Limitation Requirements:

Condition No.	Parameter	Condition
L-13		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).]

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:

- (1) The exact place, date, and time of sampling;
- (2) The dates the analyses were performed;
- (3) The person(s) who performed the analyses;
- (4) The analytical techniques, procedures or methods used; and
- (5) The results of all required analyses. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(29)(a).]

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Submittal/Action Requirements:

Condition No.	Condition
S-1	The permittee shall, not less than once annually, (with the DMR due on January 28th), certify that chemicals added for cooling water system 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 zinc but including chromium) 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. Submit an Annual Compliance Certification: Due annually by the 28th of January. [WPC-1 Chapter One]
S-2	<p>Reporting</p> <p>Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report (DMR). DMR data must be submitted electronically using the MDEQ NetDMR system NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD.</p> <p>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)]</p>
S-3	<p>Reporting Requirements - Planned Changes</p> <p>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:</p> <p>(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</p> <p>(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).</p> <p>(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).]</p>

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Submittal/Action Requirements:

Condition No.	Condition
S-4	<p>Reporting Requirements - Anticipated Noncompliance</p> <p>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).]</p>
S-5	<p>Noncompliance Notification - Twenty-Four Hour Reporting</p> <p>(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.</p> <p>(2) The following shall be included as information which must be reported within 24 hours under this paragraph.</p> <p>(i) Any unanticipated bypass which exceeds any effluent limitation in the permit.</p> <p>(ii) Any upset which exceeds any effluent limitation in the permit.</p> <p>(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.</p> <p>(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.</p> <p>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)]</p>

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Condition No.	Condition
S-6	<p>Noncompliance Notification - Other Noncompliance</p> <p>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.</p> <p>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)]</p>
S-7	<p>Noncompliance Notification - Other Information</p> <p>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).]</p>
S-8	<p>Bypassing -Notice</p> <p>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.</p> <p>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.</p> <p>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)]</p>

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Condition No.	Condition
S-9	<p>Expiration of Permit</p> <p>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).]</p>
S-10	<p>Requirements Regarding Cooling and Boiler Water Additives</p> <p>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:</p> <ol style="list-style-type: none">(1) Name and composition of the proposed additive,(2) Proposed discharge concentration,(3) Dosage addition rates,(4) Frequency of use,(5) EPA registration, if applicable, and(6) Aquatic species toxicological data. <p>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).]</p>

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Narrative Requirements:

Definitions:

Condition No.	Condition
T-1	<p>Definitions: General</p> <p>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.]</p>
T-2	<p>Definitions: Monthly Average</p> <p>"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).]</p>
T-3	<p>Definitions: Daily Discharge</p> <p>"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).]</p>
T-4	<p>Definitions: Daily Maximum</p> <p>"Daily maximum" means the highest "daily discharge" over a calendar month. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(16).]</p>
T-5	<p>Definitions: Toxic Pollutants</p> <p>"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).]</p>

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Condition No.	Condition
T-6	<p>Definitions: Hazardous Substances</p> <p>"Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]</p>
T-7	<p>Definitions: Quarterly Average</p> <p>"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).]</p>
T-8	<p>Definitions: Weekly Average</p> <p>"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).]</p>
T-9	<p>Definitions: Quarterly Maximum</p> <p>"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).]</p>
T-10	<p>Definitions: Maximum Monthly Average</p> <p>Maximum Monthly Average means the highest "monthly average" over a monitoring period. [40 CFR 122]</p>

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Condition No.	Condition
T-11	<p>Definitions: Yearly Average</p> <p>"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).]</p>
T-12	<p>Definitions: Yearly Maximum</p> <p>"Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [11 Miss. Admin. Code Pt. 6, R. 1.1.1.A(88).]</p>
T-13	<p>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).]</p>
Condition No.	Condition
T-14	<p>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).]</p>
T-15	<p>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).]</p>
T-16	<p>Representative Sampling</p> <p>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).]</p>

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Condition No.	Condition
T-17	<p>Reporting</p> <p>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.]</p>
T-18	<p>Reporting</p> <p>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).]</p>
T-19	<p>Reporting</p> <p>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).]</p>
T-20	<p>Test Procedures</p> <p>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).]</p>

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Condition No.	Condition
T-21	<p>Records Retention</p> <p>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).]</p>
T-22	<p>Falsifying Reports</p> <p>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).]</p>
T-23	<p>Facility Expansion and/or Modification</p> <p>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.]</p>
T-24	<p>Duty to Comply</p> <p>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).]</p>

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T-25	<p>Proper Operation, Maintenance and Replacement</p> <p>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).]</p>
T-26	<p>Duty to Mitigate</p> <p>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).]</p>
T-27	<p>Bypassing</p> <p>The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]</p>
T-28	<p>Bypassing - Definitions</p> <p>"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.</p> <p>"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)]</p>
T-29	<p>Bypassing - Bypass not exceeding limitations</p> <p>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)]</p>

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Condition No.	Condition
T-30	<p>Bypassing- Prohibition of Bypass</p> <p>(1) Bypass is prohibited, and the Commission may take enforcement action against a permittee unless:</p> <p>(i) Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage.</p> <p>(ii) 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</p> <p>(iii) The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.</p> <p>(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)]</p>
T-31	<p>Upsets</p> <p>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).]</p>
T-32	<p>Upsets- Definition</p> <p>"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).]</p>
T-33	<p>Upsets - Effect of an Upset</p> <p>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).]</p>

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Condition No.	Condition
T-34	<p>Upsets - Conditions necessary for demonstration of upset</p> <p>A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:</p> <p>(1) An upset occurred and that the permittee can identify the cause(s) of the upset;</p> <p>(2) The permitted facility was at the time being properly operated;</p> <p>(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</p> <p>(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).]</p>
T-35	<p>Upsets - Burden of proof</p> <p>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).]</p>
T-36	<p>Removed Substances</p> <p>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).]</p>
T-37	<p>Power Failures</p> <p>If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:</p> <p>(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,</p> <p>(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).]</p>

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Condition No.	Condition
T-38	<p>Inspection and Entry</p> <p>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).]</p>
T-39	<p>Transfer of Ownership or Control</p> <p>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.]</p>
T-40	<p>Signatory Requirements</p> <p>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.]</p>

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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

(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.]

T-42 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.]

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T-43	<p>Signatory Requirements - Changes to Authorization</p> <p>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.]</p>
T-44	<p>Signatory Requirements - Certification</p> <p>Any person signing a document under the signatory requirements stated in this permit shall make the following certification:</p> <p>"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.]</p>
T-45	<p>Availability of Records</p> <p>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.]</p>
T-46	<p>Duty to Provide Information</p> <p>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).]</p>

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T-47	<p>Toxic Pollutants</p> <p>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).]</p>
T-48	<p>Toxic Pollutants Notification Requirements</p> <p>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).]</p>
T-49	<p>Civil and Criminal Liability</p> <p>(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.</p> <p>(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.</p> <p>(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).]</p>
T-50	<p>Oil and Hazardous Substance Liability</p> <p>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).]</p>
T-51	<p>Property Rights</p> <p>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.]</p>

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T-52	<p>Severability</p> <p>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).]</p>
T-53	<p>Protection of Confidential Information</p> <p>(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.]</p>
T-54	<p>Protection of Confidential Information- continued</p> <p>(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.]</p>

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T-55	<p>Protection of Confidential Information- continued</p> <p>(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.]</p>
T-56	<p>Spill Prevention and Best Management Plans</p> <p>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).]</p>
T-57	<p>Reopener Clause</p> <p>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:</p> <ol style="list-style-type: none">1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or2. 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).]

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T-58	<p>Closure Requirements</p> <p>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).]</p>																		
T-59	<p>Permit Actions</p> <p>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).]</p>																		
T-60	<p>Samples for the parameters listed below should be analyzed using the following methods or their approved equivalent:</p> <table><tr><td>Parameter</td><td>Method</td><td>Minimum Level</td></tr><tr><td>Copper, Total Recoverable</td><td>200.8</td><td>0.5 micrograms/L</td></tr><tr><td>Zinc, Total Recoverable</td><td>200.8</td><td>10 micrograms/L</td></tr><tr><td>lead Total Recoverable</td><td>200.8</td><td>0.5 micrograms/L</td></tr><tr><td>Iron, Total Recoverable</td><td>200.8</td><td>0.5 micrograms/L</td></tr><tr><td>Nickel, Total Recoverable</td><td>200.8</td><td>0.5 micrograms/L. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</td></tr></table>	Parameter	Method	Minimum Level	Copper, Total Recoverable	200.8	0.5 micrograms/L	Zinc, Total Recoverable	200.8	10 micrograms/L	lead Total Recoverable	200.8	0.5 micrograms/L	Iron, Total Recoverable	200.8	0.5 micrograms/L	Nickel, Total Recoverable	200.8	0.5 micrograms/L. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
Parameter	Method	Minimum Level																	
Copper, Total Recoverable	200.8	0.5 micrograms/L																	
Zinc, Total Recoverable	200.8	10 micrograms/L																	
lead Total Recoverable	200.8	0.5 micrograms/L																	
Iron, Total Recoverable	200.8	0.5 micrograms/L																	
Nickel, Total Recoverable	200.8	0.5 micrograms/L. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]																	

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RPNT0000000001 (MS0029521-001) Outfall 001 (Discharge/Mixing Basin discharge. Effluent consists of wastewater from the internal Outfalls 002, 004, 005, 006, and 011 and discharges to the Mississippi River) - EXTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Chlorine, free available	Chlorine, free available: During outages when the Natural Draft and Auxiliary Cooling Tower has no load and the Plant Service Water (PSW) bypasses the tower and discharges directly to the Discharge Basin through Outfall 001, the free available chlorine (FAC) limitations shall be imposed on this outfall. If the PSW does not bypass the tower, the permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator Code NODI=9 on their monthly discharge monitoring report. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1. 1.1.4.A(4)]
M-2	Chlorine, free available	Chlorine, free available: FAC shall be monitored continuously with multiple grab samples taken every 30 minutes following commencement of the bypass and continuing until chlorine is no longer detectable. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]
M-3	Chlorine, free available	Chlorine, free available: If the permittee does not utilize chlorination, the permittee shall indicate conditional monitoring (not required this period) by including the No Data Indicator Code NODI=9 on their monthly discharge monitoring report (DMR). [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]
M-4	Flow	Flow: The permittee may use data from either the continuous monitors/recorders or the Balance of Plant Computer System. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]
M-5	Temperature (Deg. F)	Temperature (Deg. F): The permittee may use data from either the continuous monitors/recorders or the Balance of Plant Computer System. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]
M-6	Chlorination Duration	Chlorination Duration: FAC may not be discharged from any unit for more than two hours in any one day unless the utility can demonstrate to the Permit Board that discharging for more than two hours is required for macro invertebrate control. When units are chlorinated simultaneously, the chlorination period may not exceed two hours. [40 CFR 423.13.(d)(2)]

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RPNT0000000001 (MS0029521-001) Outfall 001 (Discharge/Mixing Basin discharge. Effluent consists of wastewater from the internal Outfalls 002, 004, 005, 006, and 011 and discharges to the Mississippi River) - EXTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-7		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following confluence of all waste waters permitted for discharge at Outfall 001, but prior to entering or mixing with the receiving waters. However, when the Balance of Plant Computer System is utilized to monitor flow and temperature, the samples for each permitted wastewater stream shall be taken after final treatment but prior to entering or mixing with the receiving waters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Submittal/Action Requirements:

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)]

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RPNT0000000002 (MS0029521-002) Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown) - INTERNAL:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit may discharge FAC or TRC at any one time. The exact time of discharge of FAC or TRC shall be recorded for each unit and reported with the discharge monitoring report (DMR). [40 CFR 423.13.(d) (2)]
L-2		The addition of any chemical product to the cooling water other than those submitted with the application is prohibited unless prior written approval is obtained in accordance with condition S-9 on page 7 of this permit. Chemicals used for the maintenance of cooling water chemistry, or otherwise permitted to operate or maintain the cooling water system shall not cause a violation of the terms and conditions contained in condition S-1 on page 5 of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Chlorine, free available	Chlorine, free available: Shall be monitored utilizing multiple grab samples. Multiple grab samples shall consist of one grab sample taken every 30 minutes following start-up of blowdown (after chlorine addition) and ending when FAC is no longer detectable. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]
M-2		Start-up of blowdown shall not occur until a series of instantaneous readings indicate that the discharge is in conformance with the permit limitations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-3		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following blowdown, but prior to mixing with any other wastewaters with the exception of the Treated Liquid Rad wastewater discharged through Outfall 011, which may mix with the discharge from Outfall 002 prior to sample collection. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]

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RPNT0000000002 (MS0029521-002) Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown) - INTERNAL:

Submittal/Action Requirements:

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)]

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RPNT0000000003 (MS0029521-004) Outfall 004 (Unit A Standby Service Water Cooling Tower Blowdown) - INTERNAL:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The addition of any chemical product to the cooling water other than those submitted with the application is prohibited unless prior written approval is obtained in accordance with condition S-10 on page 8 of this permit. Chemicals used for the maintenance of cooling water chemistry, or otherwise permitted to operate or maintain the cooling water system shall not cause a violation of the terms and conditions contained in condition S-1 on page 5 of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(a)]
L-2		Neither Free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit may discharge FAC or TRC at any one time. The exact time of discharge of FAC or TRC shall be recorded for each unit and reported with the discharge monitoring report (DMR). [11 Miss. Admin. Code Pt. 6, Ch. 2. 1.1.4.A(4), 40 CFR 423.13.d(2)]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Chlorine, free available	Chlorine, free available: Multiple grab samples shall consist of a series of grab samples taken every 30 minutes following startup of blowdown after chlorine addition until no chlorine is detectable. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]
M-2	Chlorine, free available	Chlorine, free available: Monitoring shall be performed daily whenever a batch is discharged. Initiation of discharge shall not occur until a series of instantaneous readings indicate the discharge shall be in compliance with permit limitations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-3	Flow	Flow: The flow reported shall be the total volume discharged in a 24-hour period. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.28(a)]

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RPNT0000000003 (MS0029521-004) Outfall 004 (Unit A Standby Service Water Cooling Tower Blowdown) - INTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-4	Zinc (Total Recoverable)	<p>Zinc (Total Recoverable): Composite Sampling:</p> <p>If the basin has been recirculated for a time frame of no less than four (4) hours to allow for adequate mixing within each quadrant, a composite will be defined as the combined sample of the four (4) grab samples from each quadrant of the basin.</p> <p>If the basin is not recirculated for a sufficient period of time to allow for adequate mixing within the quadrants, a composite will be defined as the combined sample of the three (3) individual samples collected at the beginning, middle and end of the discharge for each batch discharge. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>
M-5	Chlorination Duration	<p>Chlorination Duration: Monitoring shall be performed daily whenever a batch discharge occurs. Initiation of a discharge shall not occur until a series of instantaneous readings indicate the discharge shall be in compliance with permit limitations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>
M-6		<p>Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following blowdown, but prior to mixing with any other wastewaters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)]</p>

Submittal/Action Requirements:

Condition No.	Condition
S-1	<p>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)]</p>

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RPNT0000000003 (MS0029521-004) Outfall 004 (Unit A Standby Service Water Cooling Tower Blowdown) - INTERNAL:

Narrative Requirements:

Condition No.	Condition
T-1	Upon commencement of discharge from Outfall 004, the permittee shall collect one effluent sample from this outfall and test for the Part A and Part B pollutants listed on the EPA Application Form 2C, Item V. The permittee shall submit a completed EPA Application Form 2C, Item V no later than the 28th day of the month following the completion of the effluent sampling. For Part A pollutants, the application must contain the results of at least one analysis done for each pollutants listed in Part A. For Part B pollutants, the application must contain analysis results of at least one analysis taken for each parameter in Part B that is believed present. This permit may be reopened and modified if data indicates a violation of water quality standards for any of the above mentioned parameters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

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RPNT0000000004 (MS0029521-005) Outfall 005 (Unit B Standby Service Water Cooling Tower Blowdown) - INTERNAL:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The addition of any chemical product to the cooling water other than those submitted with the application is prohibited unless prior written approval is obtained in accordance with condition S-9 on page 7 of this permit. Chemicals used for the maintenance of cooling water chemistry, or otherwise permitted to operate or maintain the cooling water system shall not cause a violation of the terms and conditions contained in condition S-1 on page 5 of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
L-2		Neither Free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit may discharge FAC or TRC at any one time. The exact time of discharge of FAC or TRC shall be recorded for each unit and submitted with the discharge monitoring report (DMR). [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4), 40 CFR 423.13.d(2)]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Chlorine, free available	Chlorine, free available: Sample Type Multiple grab samples shall consist of a series of grab samples taken every 30 minutes following startup of blowdown after chlorine addition until no chlorine is detectable. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-2	Chlorine, free available	Chlorine, free available: Monitoring shall be performed daily whenever a batch discharge occurs. Initiation of a discharge shall not occur until a series of instantaneous readings indicate the discharge shall be in compliance with permit limitations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-3	Flow	Flow: The Flow reported shall be the total volume discharged in a 24-hour period. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

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RPNT0000000004 (MS0029521-005) Outfall 005 (Unit B Standby Service Water Cooling Tower Blowdown) - INTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-4	Zinc (Total Recoverable)	<p>Zinc (Total Recoverable): Composite Sampling</p> <p>If the basin has been recirculated for a time frame of no less than four (4) hours to allow for adequate mixing within each quadrant, the composite sample will be defined as the combined sample of the four (4) grab samples from each quadrant of the basin.</p> <p>If the basin is not recirculated for a sufficient period of time to allow for adequate mixing within the quadrants, a composite will be defined as the combined sample of the three (3) individual samples collected at the beginning, middle and end of the discharge for each batch discharge. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>
M-5	Chlorination Duration	<p>Chlorination Duration: Monitoring shall be performed daily whenever a batch discharge occurs. Initiation of a discharge shall not occur until a series of instantaneous readings indicate the discharge shall be in compliance with permit limitations. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>
M-6		<p>Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following blowdown, but prior to mixing with any other wastewaters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)]</p>

Submittal/Action Requirements:

Condition No.	Condition
S-1	<p>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)]</p>

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RPNT0000000004 (MS0029521-005) Outfall 005 (Unit B Standby Service Water Cooling Tower Blowdown) - INTERNAL:

Narrative Requirements:

Condition No.	Condition
T-1	Upon commencement of discharge from Outfall 005, the permittee shall collect one effluent sample from this outfall and test for the Part A and Part B pollutants listed on the EPA Application Form 2C, Item V. The permittee shall submit a completed EPA Application Form 2C, Item V no later than the 28th day of the month following the completion of the effluent sampling. For Part A pollutants, the application must contain the results of at least one analysis done for each pollutants listed in Part A. For Part B pollutants, the application must contain analysis results of at least one analysis taken for each parameter in Part B that is believed present. This permit may be reopened and modified if data indicates a violation of water quality standards for any of the above mentioned parameters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

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RPNT0000000005 (MS0029521-006) Outfall 006 (Treated low volume wastes consisting of demineralizer wastewater, carbon filter backwash, and Water Treatment Building sump wastewater) - INTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Flow	Flow: The Flow reported shall be the total volume discharged in a 24-hour period. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A (4)]
M-2		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following final treatment, but prior to mixing with any other wastewaters. [11 Miss. Admin. Code Pt. 6, Ch. 1, Subch. 1. IV.A(28)]

Submittal/Action Requirements:

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)]

Narrative Requirements:

Condition No.	Condition
T-1	Upon commencement of discharge from Outfall 006, the permittee shall collect one effluent sample from this outfall and test for the Part A and Part B pollutants listed on the EPA Application Form 2C, Item V. The permittee shall submit a completed EPA Application Form 2C, Item V no later than the 28th day of the month following the completion of the effluent sampling. For Part A pollutants, the application must contain the results of at least one analysis done for each pollutants listed in Part A. For Part B pollutants, the application must contain analysis results of at least one analysis taken for each parameter in Part B that is believed present. This permit may be reopened and modified if data indicates a violation of water quality standards for any of the above mentioned parameters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

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RPNT0000000006 (MS0029521-007) Outfall 007 (Low volume waste discharge consisting of miscellaneous wastewaters discharged into Sediment Basin B. The wastewater is comprised of Administrative Building drains, yard and storm drains, fire water pump house, oily waste sumps, ionics reject water, Turbine Building cooling water blowdown, HVAC cooling tower wastewater, HVAC once-through cooling, outage air compressor once-through cooling, intermittent standby service water, plant service water leakage and small releases) - INTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the most accessible point following confluence of all separate wastewater streams, which discharge at the East Wing Wall but prior to entering or mixing with the waters in Sediment Basin B. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)]

Submittal/Action Requirements:

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)]

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RPNT0000000007 (MS0029521-010) Outfall 010 (Total facility treated sanitary wastewater discharged to Basin A) - INTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point inclusive of all wastewaters permitted for discharge at Outfall 010, but prior to entering or mixing with Basin A. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)]

Submittal/Action Requirements:

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)]

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RPNT0000000008 (MS0029521-011) Outfall 011 (Low Volume Wastes discharge consisting of ion exchange wastewater from the liquid radwaste treatment system, floor drains, and lab drains) - INTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following final treatment, but prior to entering for mixing with any other wastewaters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)]

Submittal/Action Requirements:

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)]

Narrative Requirements:

Condition No.	Condition
T-1	Upon commencement of discharge from Outfall 011, the permittee shall collect one effluent sample from this outfall and test for the Part A and Part B pollutants listed on the EPA Application Form 2C, Item V. The permittee shall submit a completed EPA Application Form 2C, Item V no later than the 28th day of the month following the completion of the effluent sampling. For Part A pollutants, the application must contain the results of at least one analysis done for each pollutants listed in Part A. For Part B pollutants, the application must contain analysis results of at least one analysis taken for each parameter in Part B that is believed present. This permit may be reopened and modified if data indicates a violation of water quality standards for any of the above mentioned parameters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
T-2	The radioactive component of this discharge is regulated by the Nuclear Regulatory Commission (NRC). [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4), 40 CFR 401.11.f]

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RPNT0000000009 (MS0029521-013) Outfall 013 (Treated effluent from Basin A that enters an Unnamed Tributary thence into Hamilton Lake. Contributing sources of wastewaters include stand by service water leakage, storm water runoff, and the combined discharge of Internal Outfalls 010 and 016)- EXTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following final treatment, but prior to entering for mixing with the receiving stream. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(28)]

Submittal/Action Requirements:

Condition No.	Condition
S-1	The Permittee shall submit analytical results on an annual Discharge Monitoring Report (DMR) : Due annually by the 28th of January. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.15(c)]
S-2	The Permittee shall submit analytical results on a quarterly Discharge Monitoring Report (DMR) : Due quarterly, by the 28th of Jan, April, July, and Oct. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.15(c)]

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RPNT0000000009 (MS0029521-013) Outfall 013 (Treated effluent from Basin A that enters an Unnamed Tributary thence into Hamilton Lake. Contributing sources of wastewaters include stand by service water leakage, storm water runoff, and the combined discharge of Internal Outfalls 010 and 016)- EXTERNAL:

Narrative Requirements:

Condition No.	Condition
T-1	<p>The parameter listed below shall be monitored once per month when discharging, utilizing 24-hour composite sampling, 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.</p> <p>Parameter</p> <p>Iron, Total Recoverable Copper, Total Recoverable Lead, Total Recoverable Nickel, Total Recoverable. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]</p>

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RPNT0000000010 (MS0029521-014) Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake. Contributing wastewater sources include effluents from internal Outfall 007, standby service water leakage, intermittent circulating water basin overflows, and storm water runoff) - EXTERNAL:

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following final treatment, but prior to entering or mixing with the receiving stream. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Submittal/Action Requirements:

Condition No.	Condition
S-1	The Permittee shall submit analytical results on an annual Discharge Monitoring Report (DMR) : Due annually by the 28th of January. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.15(c)]
S-2	The Permittee shall submit analytical results on a quarterly Discharge Monitoring Report (DMR) : Due quarterly, by the 28th of Jan, April, July, and Oct. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A.15(c)]

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RPNT0000000010 (MS0029521-014) Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake. Contributing wastewater sources include effluents from internal Outfall 007, standby service water leakage, intermittent circulating water basin overflows, and storm water runoff) - EXTERNAL:

Narrative Requirements:

Condition

No. Condition

T-1 The parameter listed below shall be monitored once per month when discharging, utilizing 24-hour composite sampling, 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

Iron, Total Recoverable

Copper, Total Recoverable

Lead, Total Recoverable

Nickel, Total Recoverable. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

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RPNT0000000011 (MS0029521-016) Outfall 016 (Low volume waste discharge consisting of miscellaneous wastewaters from the Energy Services Center inclusive of ECS water Softener back wash, HVAC cooling tower waste water, plant softener backwash, and storm water runoff) - INTERNAL:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		No chemical treatments containing chloride, zinc or chromium shall be added to any of the waters subject to discharge at this outfall (Outfall 016) without prior notification and permitting authority approval in accordance with the conditions described in S-10 on page 8 of this permit. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the nearest accessible point following final treatment, but prior to entering for mixing with any other wastewaters. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]
M-2		Samples taken in compliance with the effluent limitations and monitoring requirements of this permit shall be taken at the most accessible point following confluence of all wastewaters permitted for discharge at this outfall (Outfall 016), but prior to entering Basin A. [11 Miss. Admin. Code Pt. 6, R. 1.1.4.A(4)]

Submittal/Action Requirements:

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

GENERAL INFORMATION

Entergy Mississippi Inc, Grand Gulf Nuclear Station
7003 Bald Hill Road
Port Gibson, MS
Claiborne County

Alternate/Historic Identifiers

GENERAL INFORMATION

ID	Alternate/Historic Name	User Group	Start Date	End Date
2082	Entergy Operations, Inc.	Official Site Name	04/28/1981	
2802100023	Entergy MS, Grand Gulf Nuclear Station	Air-AIRS AFS	10/12/2000	
MSD000644617	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Hazardous Waste-EPA ID	10/12/2000	
042000023	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Title V Operating	09/05/1997	09/01/2002
042000023	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Construction	08/16/1999	
042000018	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Construction	03/13/1984	03/01/1985
042000018	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-State Operating	04/28/1981	08/28/1981
MSR101071	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Construction	04/30/1998	10/28/1998
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	08/18/1993	07/13/1997
MS0029521	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Water - NPDES	09/19/1997	09/16/2002
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	10/31/2000	02/10/2006
MS0029521	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Water - NPDES	07/24/2003	06/30/2008
042000023	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Synthetic Minor Operating	06/01/2004	05/31/2009
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	02/10/2006	12/01/2010
2082	Entergy Mississippi Inc, Grand Gulf Nuclear Station	Air-Notification	04/07/2008	
2082 001	Grand Gulf Nuclear, Middle South Energy	GARD	04/21/1981	
2082	Grand Gulf Nuclear Station Temporary Rental Office Buildings for RFO-16	Air-Notification	10/17/2008	
2082	Grand Gulf portable building SIC 4911	Air-Notification	05/27/2009	
2082	Grand Gulf Nuclear Station Warehouse	Air-Notification	07/19/2010	
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	12/01/2010	09/28/2015
MSR105946	Entergy Mississippi Inc, Grand Gulf Nuclear Station	GP-Construction	05/13/2011	12/31/2015
MS0029521	Entergy Mississippi Inc, Grand Gulf Nuclear Station	Water - NPDES	09/02/2011	08/31/2016
042000023	Entergy Mississippi Inc, Grand Gulf Nuclear Station	Air-Synthetic Minor Operating	01/06/2014	12/31/2018
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	12/30/2015	10/31/2020
2082	Grand Gulf Nuclear Station	Air-Notification	05/08/2017	
	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	

Basin: Mississippi River Basin - direct dischargers to MS

GENERAL INFORMATION

Location Description:

PG- Plant Entrance (General). Data collected by Greg Miller on 11/16/2005. Elevation 219 feet. Bald Hill Road entrance is closed must enter plant from Grand Gulf Road.