Attachment C

Clean Water Act Documentation

- NPDES Permit MS0029521
- Water Quality Certification, February 5, 1974

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

Mississippi Department of Environmental Quality

Issued/Modified: SEP 0 2 2011
Expires: AUG 3 1 2016

Permit No. MS0029521
Agency Interest # 2082

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

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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.: PER20070001

Subject Item Inventory:

ID	Designation	Description
AI2082		
RPNT1	MS0029521-001	Outfall 001 (Discharge Basin - Inclusive of wastewater from the following Outfalls: 002, 004, 005, 006, and 011 Discharged to the Mississippi River) - EXTERNAL
RPNT2	MS0029521-002	Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown including waters from ESF Room Cooler flushes) - INTERNAL
RPNT3	MS0029521-004	Outfall 004 (Unit A Standby Service Water) - INTERNAL
RPNT4	MS0029521-005	Outfall 005 (Unit B Standby Service Water) - INTERNAL
RPNT5	MS0029521-006	Outfall 006 (Treated Low Volume Wastewater) - INTERNAL
RPNT6	MS0029521-007	Outfall 007 (Miscellaneous Wastewaters discharged into Sediment Basin B 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 Blowdown; Air Conditioner Once Through Cooling; Outage Air Compressor Once Through Cooling; and Intermittent Standby Service Water and 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 (Treated Liquid Rad Wastewater. Contributing sources include Dilute Borated Water) - 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 Effluents from Outfalls 010, 016, Standby Service Water Leakage, and Stormwater Runoff) - EXTERNAL
RPNT10	MS0029521-014	Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake. Contributing Sources of Wastewaters include Effluents from Outfalls 007, Standby Service Water Leakage, Intermittent Circulating Water Basin Overflows and Stormwater Runoff) - EXTERNAL
RPNT11	MS0029521-016	Outfall 016 (Miscellaneous Wastewaters from the Energy Services Center Inclusive of Water Softener Backwash, Air Conditioning Cooling Tower Blowdown and Stormwater Runoff) - INTERNAL

Receiving Stream Relationships:

Subject Item	Relationship	Receiving Stream
AI 2082	Discharges Into	Lake Hamilton
RPNT1 Outfall 001 (Discharge Basin - Inclusive of wastewater from the following Outfalls: 002, 004, 005, 006, and 011 Discharged to the Mississippi River) - EXTERNAL	Discharges Into	Mississippi River

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.: PER20070001

Subject Item	Relationship	Receiving Stream
RPNT10 Outfall 014 (Treated Effluent from Basin B which enters an Unnamed Tributary thence into Hamilton Lake. Contributing Sources of Wastewaters include Effluents from Outfalls 007, Standby Service Water Leakage, Intermittent Circulating Water Basin Overflows and Stormwater Runoff) - EXTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton
RPNT11 Outfall 016 (Miscellaneous Wastewaters from the Energy Services Center Inclusive of Water Softener Backwash, Air Conditioning Cooling Tower Blowdown and Stormwater Runoff) - INTERNAL	Discharges Into	Unnamed Creek
	Then Into	Lake Hamilton
RPNT2 Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown including waters from ESF Room Cooler flushes) - INTERNAL	Discharges Into	Mississippi River
RPNT3 Outfall 004 (Unit A Standby Service Water) - INTERNAL	Discharges Into	Mississippi River
RPNT4 Outfall 005 (Unit B Standby Service Water) - INTERNAL	Discharges Into	Mississippi River
RPNT5 Outfall 006 (Treated Low Volume Wastewater) - INTERNAL	Discharges Into	Mississippi River
RPNT6 Outfall 007 (Miscellaneous Wastewaters discharged into Sediment Basin B 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 Blowdown; Air Conditioner Once Through Cooling; Outage Air Compressor Once Through Cooling; and Intermittent Standby Service Water and 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 (Treated Liquid Rad Wastewater. Contributing sources include Dilute Borated Water) - 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 Effluents from Outfalls 010, 016, Standby Service Water Leakage, and Stormwater Runoff) - EXTERNAL	Discharges Into	Unnamed Creek

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.: PER20070001

Subject Item	Relationship	Receiving Stream
RPNT9 Outfall 013 (Treated Effluent from Basin A that enters an Unnamed Tributary thence into Hamilton Lake. Contributing Sources of Wastewaters include Effluents from Outfalls 010, 016, Standby Service Water Leakage, and Stormwater Runoff) - EXTERNAL	Then Into	Lake Hamilton

KEY

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

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: **Outfall 001 (Discharge Basin - Inclusive of wastewater from the following Outfalls: 002, 004, 005, 006, and 011 Discharged to the Mississippi River) - EXTERNAL**

RPNT0000000001: 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
Chlorination Duration Effluent	******	******	******	******	******	120 Daily Maximum	min	See Permit	Measurement	Jan-Dec
Chlorine, free available Effluent	******	******	******	******	0.2 Monthly Average	0.5 Monthly Maximum	mg/L	See Permit	Check Requirements	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Continuously	Continuous Recorder	Jan-Dec
pH Effluent	******	******	******	6.0 Minimum	******	9.0 Maximum	SU	Weekly	Grab Sampling	Jan-Dec
Temperature (Deg. F) Effluent	******	******	******	******	Report Monthly Average	Report Monthly Maximum	degrees F	Continuously	Continuous Recorder	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: **Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown including waters from ESF Room Cooler flushes) - INTERNAL**

RPNT0000000002: **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
Chlorination Duration Effluent	******	******	******	******	******	120 Daily Maximum	min	Twice per Month	Measurement	Jan-Dec
Chlorine, free available Effluent	******	******	******	******	0.2 Monthly Average	0.5 Monthly Maximum	mg/L	Continuously	Check Requirements	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Twice per Month	Instantaneous Sampling	Jan-Dec
Zinc (Total Recoverable) Effluent	******	******	******	******	1.0 Monthly Average	1.0 Monthly 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) - INTERNAL**

RPNT0000000003: **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
Chlorination Duration Effluent	******	******	******	******	******	120 Daily Maximum	min	Once per Batch During Operation	Measurement	Jan-Dec
Chlorine, free available Effluent	******	******	******	******	0.2 Monthly Average	0.5 Monthly Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Once per Batch During Operation	Instantaneous Sampling	Jan-Dec
Zinc (Total Recoverable) Effluent	******	******	******	******	1.0 Monthly Average	1.0 Monthly 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) - 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
Chlorination Duration Effluent	******	******	******	******	******	120 Daily Maximum	min	Once per Batch During Operation	Measurement	Jan-Dec
Chlorine, free available Effluent	******	******	******	******	0.2 Monthly Average	0.5 Monthly Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Once per Batch During Operation	Instantaneous Sampling	Jan-Dec
Zinc (Total Recoverable) Effluent	******	******	******	******	1.0 Monthly Average	1.0 Monthly Maximum	mg/L	Once per Batch During Operation	Check Requirements	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: **Outfall 006 (Treated Low Volume Wastewater) - INTERNAL**

RPNT0000000005: **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
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Once per Batch During Operation	Instantaneous Sampling	Jan-Dec
Oil and grease Effluent	******	******	******	******	15 Monthly Average	20 Monthly Maximum	mg/L	Once per Batch During Operation	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	******	******	******	******	30 Monthly Average	100 Monthly Maximum	mg/L	Once per Batch During Operation	Grab Sampling	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: **Outfall 007 (Miscellaneous Wastewaters discharged into Sediment Basin B 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 Blowdown; Air Conditioner Once Through Cooling; Outage Air Compressor Once Through Cooling; and Intermittent Standby Service Water and Plant Service Water leakage and small releases) - INTERNAL**

RPNT0000000006: 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
Chlorine, total residual Effluent	******	******	******	******	Report Monthly Average	Report Monthly Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Twice per Month	Instantaneous Sampling	Jan-Dec
Oil and grease Effluent	******	******	******	******	15 Monthly Average	20 Monthly Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	******	******	******	******	30 Monthly Average	100 Monthly 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**

RPNT0000000007: **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
Chlorine, total residual Effluent	******	******	******	******	Report Monthly Average	0.5 Monthly Maximum	mg/L	Twice per Month	Grab Sampling	Jan-Dec
Fecal coliform, general Effluent	******	******	******	******	2000 Monthly Average	4000 Monthly Maximum	# of colonies/100 ml	Twice per Month	Grab Sampling	Nov-Apr
Fecal coliform, general Effluent	******	******	******	******	200 Monthly Average	400 Monthly Maximum	# of colonies/100 ml	Twice per Month	Grab Sampling	May-Oct
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Continuously	Continuous Recorder	Jan-Dec
Oxygen Demand, biochemical, 5-day (20 degrees C) Effluent	******	******	******	******	30 Monthly Average	45 Monthly Maximum	mg/L	Twice per Month	24-hr Composite	Jan-Dec
pH Effluent	******	******	******	6.0 Minimum	******	9.0 Maximum	SU	Twice per Month	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	******	******	******	******	30 Monthly Average	45 Monthly Maximum	mg/L	Twice per Month	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: **Outfall 011 (Treated Liquid Rad Wastewater. Contributing sources include Dilute Borated Water) - INTERNAL**

RPNT0000000008: **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
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	******	******	******	******	Continuously	Pump Log	Jan-Dec
Solids (Total Suspended) Effluent	******	******	******	******	Report Monthly Average	30 Monthly 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 Effluents from Outfalls 010, 016, Standby Service Water Leakage, and Stormwater Runoff) - EXTERNAL**

RPNT0000000009: 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
Flow Effluent	Report Annual Average	Report Annual Maximum	Million Gallons per Day	******	******	******	******	Quarterly	Instantaneous Sampling	Jan-Dec
pH Effluent	******	******	******	Report Minimum	******	Report Maximum	SU	Quarterly	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	******	******	******	******	Report Annual Average	Report Annual Maximum	mg/L	Quarterly	Grab Sampling	Jan-Dec
Zinc (Total Recoverable) Effluent	******	******	******	******	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 Sources of Wastewaters include Effluents from Outfalls 007, Standby Service Water Leakage, Intermittent Circulating Water Basin Overflows and Stormwater Runoff) - EXTERNAL**

RPNT0000000010: 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
Flow Effluent	Report Annual Average	Report Annual Maximum	Million Gallons per Day	******	******	******	******	Quarterly	Instantaneous Sampling	Jan-Dec
pH Effluent	******	******	******	6.0 Minimum	******	9.0 Maximum	SU	Quarterly	Grab Sampling	Jan-Dec
Solids (Total Suspended) Effluent	******	******	******	******	Report Annual Average	Report Annual Maximum	mg/L	Quarterly	Grab Sampling	Jan-Dec
Zinc (Total Recoverable) Effluent	******	******	******	******	Report Quarterly Average	0.065 Quarterly Maximum	mg/L	Monthly	24-hr Composite	Jan-Dec

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Subject Item: **Outfall 016 (Miscellaneous Wastewaters from the Energy Services Center Inclusive of Water Softener Backwash, Air Conditioning Cooling Tower Blowdown and Stormwater Runoff) - INTERNAL**

RPNT0000000011: 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
Chlorine, total residual *Effluent*	******	******	******	******	Report Annual Average	0.5 Annual Maximum	mg/L	Twice per Quarter	Grab Sampling	Jan-Dec
Flow *Effluent*	Report Annual Average	Report Annual Maximum	Million Gallons per Day	******	******	******	******	Twice per Quarter	Instantaneous Sampling	Jan-Dec
pH *Effluent*	******	******	******	6.0 Minimum	******	9.0 Maximum	SU	Twice per Quarter	Grab Sampling	Jan-Dec