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

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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 RPNT7	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 Outfall 010 (Total Facility Treated Sanitary Wastewater Discharged to Basin A) - INTERNAL
		Outfall 011 (Treated Liquid Rad Wastewater. Contributing sources include Dilute Borated Water) - INTERNAL
RPNT8	MS0029521-011	
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

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
	Discharges Into Unital Then Into La Discharges Into Unital Discharges Into M Discharges Into M	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		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

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

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

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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

	1		Dise	charge Limita	tions			Monitoring Requirements			
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Chlorination Duration Effluent	*****	*****	*****	****	*****	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	

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

RPNT000000002: MS0029521-002

			Disc	harge Limita	tions			Monitoring Requirements			
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Chlorination Duration Effluent	*****	*****	*****	*****	*****	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	

Subject Item: Outfall 004 (Unit A Standby Service Water) - INTERNAL

RPNT000000003: MS0029521-004

			Disc	harge Limitat	tions		Discharge Limitations									
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months						
Chlorination Duration Effluent	*****	*****	*****	*****	*****	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						

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

RPNT000000004: MS0029521-005

			Disc	Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorination Duration Effluent	*****	*****	****	*****	*****	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

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

RPNT000000005: MS0029521-006

			Disc	Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	*****	*****	*****	*****	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

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

RPNT000000006: MS0029521-007

			Disc	Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorine, total residual Effluent	*****	*****	*****	*****	Report Monthly Average	Report 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

Subject Item: Outfall 010 (Total Facility Treated Sanitary Wastewater Discharged to Basin A) - INTERNAL RPNT0000000007: MS0029521-010

			Dise	charge Limita	tions			Monitoring Requirements			
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Month	
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	

Subject Item: Outfall 011 (Treated Liquid Rad Wastewater. Contributing sources include Dilute Borated Water) - INTERNAL RPNT0000000008: MS0029521-011

		Discharge Limitations							Monitoring Requirements		
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Flow Effluent	Report Monthly Average	Report Monthly Maximum	Million Gallons per Day	*****	*****	*****	*****	Continuously	Pump Log	Jan-Dec	
Solids (Total Suspended) Effluent	*****	*****	*****	*****	Report Monthly Average	30 Monthly Maximum	mg/L	Monthly	Grab Sampling	Jan-Dec	

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

RPNT000000009: MS0029521-013

	Discharge Limitations								Monitoring Requirements		
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Flow Effluent	Report 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	

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

		Discharge Limitations							Monitoring Requirements		
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months	
Flow Effluent	Report 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	

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

			Disc	Monitoring Requirements						
Parameter	Quantity / Loading Average	Quantity / Loading Maximum	Quantity / Loading Units	Quality / Conc. Minimum	Quality / Conc. Average	Quality / Conc. Maximum	Quality / Conc. Units	Frequency	Sample Type	Which Months
Chlorine, total residual Effluent	*****	*****	*****	*****	Report 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

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI000002082:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Polychlorinated Biphenyls	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:
		 Maintain a detailed inventory of PCB use; Assure engineering design and construction to preclude release of PCB's to the environment: 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)]
L-2		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. [WPC-1 Chapter One IV.A.28(a)]

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AI000002082 (continued):

Limitation Requirements:

Condition No. Parameter	Condition
L-3	Thermal Mixing Zone:
	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.
	Thermal Modeling:
	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.
	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)]
L-4	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 to the NRC when regarded necessary for their review. [WPC-1 Chapter One IV.A.28(a)]
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. [WPC-1 Chapter One IV.A.28(a)]

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI000002082 (continued):

Limitation Requirements:

Condition No. Parameter	Condition
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. [WPC-1 Chapter One IV.A.28(a)]
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. [WPC-1 Chapter One IV.A.28(a)]
L-8	In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.42. [WPC-1 Chapter One IV.A.28(a)]
L-9	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. [WPC-1 Chapter One IV.A.28(a)]
L-10	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. [WPC-1 Chapter One IV.A.28(a)]
L-11	There shall be no discharge of Metal Cleaning Wastewater. [WPC-1 Chapter One IV.A.28(a)]
L-12	There shall be no discharge of floating solids or visible foam in other than trace amounts. [WPC-2 Section II.2]
L-13	The discharges shall not cause the occurrence of a visible sheen on the surface of the receiving waters. [WPC-2 Section II.2]
L-14	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. [WPC-1 Chapter One Section IV.A(28)]

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AI000002082 (continued):

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. [WPC-1 Chapter One Section IV.A(29)a] 						
Submitta	l/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]

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AI000002082 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-2	Reporting
	Monitoring results obtained during the previous reporting period shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) POSTMARKED NO LATER THAN THE 28TH DAY OF THE MONTH FOLLOWING THE COMPLETED REPORTING PERIOD. Copies of these, and all other reports required herein, shall be signed in accordance with Chapter One Sections II.C. and II.E. of the Mississippi Wastewater Permit Regulations, and shall be submitted to the Mississippi Environmental Quality Permit Board at the following address:
	Mississippi Department of Environmental Quality Office of Pollution Control P.O. Box 2261
	Jackson, Mississippi 39225. [WPC-1 Chapter One Section IV.A(15)c(1)]
S-3	Reporting Requirements - Planned Changes
	The permittee shall give notice to the Permit Board as soon as possible of any planned physical alterations or additions, including but not limited to, a change of operation to the permitted facility. Notice is required in the circumstances that follow: (1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether the facility is a new source in 40 CFR 122.29(b); or (2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to either effluent limitations in the permit or notification requirements under 40 CFR 122.42(a)(1). (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported
C 4	during the permit application process or not reported pursuant to an approved land application plan; [WPC-1 Chapter One Section IV.A(15)a]
S-4	Reporting Requirements - Anticipated Noncompliance
	The permittee shall give advance notice to the Permit Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. [WPC-1 Chapter One Section IV.A(15)b]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

A1000002082 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-5	Noncompliance Notification - Twenty-Four Hour Reporting
	(1) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and/or prevent recurrence of the noncompliance.
	(2) The following shall be included as information which must be reported within 24 hours under this paragraph.
	 (i) Any unanticipated bypass which exceeds any effluent limitation in the permit. (ii) Any upset which exceeds any effluent limitation in the permit.
	 (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. (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. [WPC-1 Chapter One Section IV.A(29)e]
S-6	Noncompliance Notification - Other Noncompliance
	The permittee shall report all instances of noncompliance not reported under the twenty-four hour reporting requirements, at the time monitoring reports are submitted or within 30 days from the end of the month in which the noncompliance occurs. The reports shall contain the same information as is required under the twenty-four hour reporting requirements contained in this permit. [WPC-1 Chapter One Section IV.A(29)f]
S-7	Noncompliance Notification - Other Information
	Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permit Board, it shall promptly submit such facts or information. [WPC-1 Chapter One Section IV.A(29)g]
S-8	Expiration of Permit
	At least 180 days prior to the expiration date of this permit pursuant to the State law and regulation, the permittee who wishes to continue to operate under this permit shall submit an application to the Permit Board for reissuance. The Permit Board may grant permission to submit an application later than this, but no later than the expiration date of the permit. [WPC-1 Chapter One Section V.B(1)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI000002082 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-9	Requirements Regarding Cooling and Boiler Water Additives
	Notification shall be made to the permitting authority in writing not later than sixty (60) days prior to initiating the addition of any chemical product to the cooling water and/or boiler water which is subject to discharge, other than those previously approved and/or used. Such notification should include, but not be limited to:
	 Name and composition of the proposed additive, Proposed discharge concentration, Dosage addition rates, Frequency of use, EPA registration, if applicable, and Aquatic species toxicological data.
	Written approval must be received from the permitting authority prior to initiating use. [WPC-1 Chapter One Section IV.A(14)]
S-10	The permittee shall submit a report containing the monitoring results required by Outfall 013 permit condition S-1 and Outfall 014 permit condition S-1 and S-2, which are located on pages 34 and 35 of this permit. This report shall be sent the Environmental Permits Division and should not be combined with the Discharge Monitoring Report (DMR) submittal. Submit a monitoring results report: Due within two years after the permit effective date. [WPC-1 Chapter One IV.A.28(a)]
Narrative	e Requirements:
	tions:
Condition	
No.	Condition
T-1	Definitions: General

The permittee shall refer to WPC-1, Chapter 1, Section I.A for definitions of any permit term not specified in this permit. [WPC-1 Chapter One Section I.A]

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A1000002082 (continued):

D.C. 11

Narrative Requirements:

	Definitions:	
Condition No.	Condition	
T-2	Definitions: Monthly Average	
	"Monthly Average" means the average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during the month. The monthly average for fecal coliform bacteria is the geometric mean of "daily discharges" measured during the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [WPC-1 Chapter One Section I.A(40)]	
T-3	Definitions: Daily Discharge	
	"Daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day. [WPC-1 Chapter One Section I.A(14)]	
T-4	Definitions: Daily Maximum	
	"Daily maximum" means the highest "daily discharge" over a calendar month. [WPC-1 Chapter One Section I.A(15)]	
T-5	Definitions: Toxic Pollutants	
	"Toxic pollutants" means any pollutant listed as toxic under Section 307(a)(1) or, in the case of "sludge use or disposal practices", any pollutant identified in regulations implementing Section 405(d) of the Clean Water Act. [WPC-1 Chapter One Section I.A]	
T-6	Definitions: Hazardous Substances	
	"Hazardous substances" are defined in 40 CFR 116.4. [40 CFR 116.4]	

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI000002082 (continued):

Narrative Requirements:

Definitions:

Condition Condition No. Definitions: Quarterly Average T-7 "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 fecal coliform bacteria is the geometric mean of "daily discharges" measured during the quarter. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [WPC-1 Chapter One Section I.A(26)] T-8 Definitions: Weekly Average "Weekly average" means the average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. The weekly average for fecal coliform bacteria is the geometric mean of all "daily discharges" measured in a calendar week. In computing the geometric mean for fecal coliform 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. [WPC-1 Chapter One Section I.A(76)] Definitions: Quarterly Maximum T-9 "Quarterly Maximum" means the highest "daily discharge" measured over a three-month period. [WPC-1 Chapter One Section I.A(57)] T-10 Definitions: Maximum Monthly Average Maximum Monthly Average means the highest "monthly average" over a monitoring period. [40 CFR 122] T-11 Definitions: Yearly Average "Yearly Average" means the average of "daily discharges" over a calendar year, calculated as the sum of all "daily discharges" measured during the calendar year divided by the number of "daily discharges" measured during the calendar year. The yearly average for fecal coliform bacteria is the geometric mean of "daily discharges" during the calendar year. In computing the geometric mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero. [WPC-1 Chapter One Section I.A(77)] Definitions: Yearly Maximum T-12 "Yearly Maximum" means the highest "daily discharge" measured over a calendar year. [WPC-1 Chapter One Section I.A(78)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI0000002082 (continued):

Narrative Requirements:

Definitions:

Condition	
No.	Condition
T-13	Definitions: Submitted Except as specifically defined, or otherwise noted, in an applicable regulation or permit, any report, application, or other document or information that is required by these regulations, or by a permit issued by the Permit Board, to be submitted to the Commission, Permit Board, or MDEQ shall be deemed submitted only upon its receipt by MDEQ. [WPC-1 Chapter One]
Condition No.	Condition
T-14	The permittee shall achieve compliance with the effluent limitations specified for discharge in accordance with the following schedule: Upon Permit Issuance. [WPC-1 Chapter One Section IV.A(9)]
T-15	Within 14 days after either an interim or final date of compliance specified by this permit, the permittee shall provide the Permit Board with written notice of his compliance or noncompliance with the requirements or conditions specified to be completed by that date. [WPC-1 Chapter One Section IV.A(10)]
T-16	Representative Sampling
	Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater. [WPC-I Chapter One Section IV.A(28)e]
T-17	Reporting
	If the results for a given sample analysis are such that any parameter (other than fecal coliform) 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 fecal coliform, a value of 1.0 shall be used in calculating the geometric mean. If the resulting fecal coliform 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. [WPC-1 Chapter One Section II.G]

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AI000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-18	Reporting
	If the permittee monitors any pollutant as prescribed in the permit more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Permit Board. [WPC-1 Chapter One Section IV.A(15)c(2)]
T-19	Reporting
	Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit. [WPC-1 Chapter One Section IV.A(15)c(3)]
T-20	Test Procedures
	Test procedures for the analysis of pollutants shall include those set forth in 40 CFR 136 or alternative procedures approved and/or promulgated by EPA. [WPC-1 Chapter One Section IV.A(30)]
T-21	Records Retention
	All records and results of monitoring activities required by this permit, including calibration and maintenance records, shall be retained by the permittee for a minimum of three (3) years, unless otherwise required or extended by the Permit Board, copies of which shall be furnished to the Department upon request. [WPC-1 Chapter One Section IV.A(29)a]
T-22	Falsifying Reports
	Any permittee who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required by the Permit Board to be maintained as a condition in a permit, or who alters or falsifies the results obtained by such devices or methods and/or any written report required by or in response to a permit condition, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for a violation of a permit condition pursuant to Section 49-17-43 of the Code. [WPC-1 Chapter One Section IV.A(29)d]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-23	Facility Expansion and/or Modification
	Any facility expansion, production increases, process modifications, changes in discharge volume or location or other changes in operations or conditions of the permittee which may result in a new or increased discharge of waste, shall be reported to the Permit Board by submission of a new application for a permit pursuant to Section II.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. [WPC-1 Chapter One Section IV.A(14)]
T-24	Duty to Comply
	The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [WPC-1 Chapter One Section IV.A(2)]
T-25	Proper Operation, Maintenance and Replacement
	The permittee shall at all times properly operate, maintain, and when necessary, promptly replace all facilities and systems of collection, treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. Proper replacement includes maintaining an adequate inventory of replacement equipment and parts for prompt replacement when necessary to maintain continuous collection and treatment of wastewater. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [WPC-1 Chapter One Section IV.A(18)]
T-26	Duty to Mitigate
	The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit that has a reasonable likelihood of adversely affecting human health or the environment. [WPC-1 Chapter One Section IV.A(19)]
T-27	Bypassing
	The permittee shall comply with the terms and conditions regarding bypass found in 40 CFR 122.41(m). [40 CFR 122.41(m)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

AI0000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-28	Bypassing - Definitions
	"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
	"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. [40 CFR 122.41(m)]
T-29	Bypassing - Bypass not exceeding limitations
	The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the notice and prohibition provisions of the bypass requirements in this permit. [40 CFR 122.41(m)]
T-30	Bypassing -Notice
	Anticipated bypass- If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
	Unanticipated bypass- The permittee shall submit notice of an unanticipated bypass as required by the twenty-four hour reporting requirements set forth in this permit. [40 CFR 122.41(m)]

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AI0000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-31	Bypassing- Prohibition of Bypass
	 Bypass is prohibited, and the Commission may take enforcement action against a permittee unless: Bypass was unavoidable to prevent loss of life, personal injury, or sever property damage. 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 The permittee submitted notices as required under the Twenty-Four Hour reporting requirements set forth in this permit.
	(2) The Commission may approve an anticipated bypass, after considering its adverse affects, if the Commission determines that it will meet the three conditions listed above in paragraph (1) of this permit condition. [40 CFR 122.41(m)]
T-32	Upsets
	The permittee shall meet the conditions of 40 CFR 122.41(n) regarding "Upsets" and as in the upset requirements of this permit. [WPC-1 Chapter One Section IV.A(27)]
T-33	Upsets- Definition
	"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [WPC-1 Chapter One Section IV.A(27)]
T-34	Upsets - Effect of an Upset
	An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the "conditions necessary for demonstration of upset" requirements of this permit are met. Any determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, shall not constitute final administrative action subject to judicial review. [WPC-1 Chapter One Section IV.A(27)]

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AI000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-35	Upsets - Conditions necessary for demonstration of upset
	A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
	(1) An upset occurred and that the permittee can identify the cause(s) of the upset;
	 (2) The permitted facility was at the time being properly operated; (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 (4) The permittee complied with any remedial measures required under 40 CFR 122.41(d) (Duty to Mitigate). [WPC-1 Chapter One Section IV.A(27)]
T-36	Upsets - Burden of proof
	In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof. [WPC-1 Chapter One Section IV.A(27)]
T-37	Removed Substances
	Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewater shall be disposed of in a manner such as to prevent such materials from entering State waters and in a manner consistent with the Mississippi Solid Waste Disposal Act, the Federal Resource Conservation and Recovery Act, and the Mississippi Water Pollution Control Act. [WPC-1 Chapter One Section IV.A(21)]
T-38	Power Failures
	If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:
	(1) Provide an alternative power source to operate the wastewater control facilities; or, if such alternative power source is not in existence, and no date for its implementation appears in the permit,
	(2) Halt, reduce, or otherwise control production and/or all wastewater flows upon reduction, loss, or failure of the primary source of power to the wastewater control facilities. [WPC-1 Chapter One Section IV.A(22)]

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AI0000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-39	Inspection and Entry
	The permittee shall allow any authorized Commission representative to enter the permittee's premises at any reasonable time, to have access to and copy any applicable records, to inspect process facilities, treatment works, monitoring methods or equipment or to take samples, as authorized by Section 49-17-21 of the Code. In the event of investigation during an emergency response action, a reasonable time shall be any time of the day or night. Follow-up investigations subsequent to the conclusion of the emergency event shall be conducted at reasonable times. [WPC-1 Chapter One Section IV.A(17)]
T-40	Transfer of Ownership or Control
	This permit is not transferable to any person without proper modification of this permit following procedures found in WPC-1, Chapter 1, Section V.C. [WPC-1 Chapter One Section V.C]
T-41	Signatory Requirements
	All applications, reports, or information submitted to the Permit Board shall be signed and certified. [WPC-1 Chapter One Section II.C]
T-42	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. [WPC-1 Chapter One Section II.C]

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AI0000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-43	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. [WPC-1 Chapter One Section II.C]
T-44	Signatory Requirements - Changes to Authorization
	If an authorization under the signatory requirements of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the signatory requirements of this permit must be submitted to the Permit Board prior to or together with any reports, information, or applications. [WPC-1 Chapter One Section II.C]
T-45	Signatory Requirements - Certification
	Any person signing a document under the signatory requirements stated in this permit shall make the following certification:
	"I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." [WPC-1 Chapter One Section II.C]

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AI0000002082 (continued):

Narrative Requirements:

Condition No.	Condition
T-46	Availability of Records
	Except for information deemed to be confidential under the Mississippi Code Ann. 49-17-39 and 40 CFR 123.41, file information relating to this permit shall be made available for public inspection and copying during normal business hours at the office of the Department of Environmental Quality in Jackson, Mississippi. Written request must be provided in accordance with policies developed by the Commission and must state, specifically, records proposed for review, date proposed for review and copying requirements. [WPC-1 Chapter One Section III.E]
T-47	Duty to Provide Information
	The permittee shall furnish to the Permit Board within a reasonable time any relevant information which the Permit Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Permit Board upon request, copies of records required to be kept by the permit. [WPC-1 Chapter One Section IV.A(16)]
T-48	Toxic Pollutants
	The permittee shall comply with any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) established under Section 307(a) of the Federal Water Pollution Control Act. [WPC-1 Chapter One Section IV.A(26)]
T-49	Toxic Pollutants Notification Requirements
	The permittee shall comply with the applicable provisions of 40 CFR 122.42. [WPC-1 Chapter One Section IV.A(26)]
T-50	Civil and Criminal Liability
	 (1) Any person who violates a term, condition or schedule of compliance contained within this permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law. (2) Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. (3) It shall not be the defense of the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WPC-1 Chapter One Section IV.A(24)]

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AI000002082 (continued):

Narrative Requirements:

Condition No. Condition Oil and Hazardous Substance Liability T-51 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. [WPC-1 Chapter One Section IV.A(23)] **Property Rights** T-52 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. [WPC-1 Chapter One Section V.E] Severability T-53 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. [WPC-1 Chapter One Section IV.A(25)] Protection of Confidential Information T-54 (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. [WPC-1 Chapter One Section III.F] Protection of Confidential Information- continued T-55 (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

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. [WPC-1 Chapter One Section III.F]

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A10000002082 (continued):

Narrative Requirements:

Condition No. Condition Protection of Confidential Information- continued T-56 (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. [WPC-1 Chapter One Section III.F] Spill Prevention and Best Management Plans T-57 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. [WPC-1 Chapter One Section IV.A(12)a] Reopener Clause T-58 This permit shall be modified, or alternately, revoked and reissued, to comply with any applicable effluent standard, limitation or storm water regulation issued or approved under Section 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 402(p) of the Federal Water Pollution Control Act if the effluent standard, limitation or regulation so issued or approved: 1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit. [WPC-1 Chapter One Section IV.F(1)]

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AI000002082 (continued):

Narrative Requirements:

V.C(5)]

 Condition
 No.
 Condition

 T-59
 Closure Requirements

 Should the permittee decide to permanently close and abandon the premises upon which it operates, it shall provide a Closure Plan to the Permit Board no later than 90 days prior to doing so. This Closure Plan shall address how and when all manufactured products, by-products, raw materials, stored chemicals, and solid and liquid waste and residues will be removed from the premises or permanently disposed of on site such that no potential environmental hazard to the waters of the State will be presented. Closure plan(s) submitted to and approved by Mississippi Department of Environmental Quality for compliance with other environmental regulations will satisfy the closure requirements for those items specifically addressed in the closure plan(s) as long as the closure does not present a potential for environmental hazard to waters of the State. [WPC-1 Chapter One Section IV.A(11)]

 T-60
 Permit Actions

 The permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and

reissuance, or termination, or a modification of planned changes or anticipated noncompliance, does not stay any permit condition. [WPC-1 Chapter One Section

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RPNT0000000001 (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:

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. [WPC-1 Chapter One IV.A.28(a)]
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. [WPC-1 Chapter One IV.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). [WPC-1 Chapter One IV.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. [WPC-1 Chapter One IV.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. [WPC-1 Chapter One IV.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 423.12.(b)(8)]
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 wastewaters 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. [WPC-1 Chapter One IV.A.28(a)]

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT0000000001 (continued):

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. [WPC-1 Chapter One IV.A.15(c)]		

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RPNT0000000002 (MS0029521-002) Outfall 002 (Natural Draft and Auxiliary Cooling Tower Blowdown including waters from ESF Room Cooler flushes) - 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 423.12.(b)(8)]
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. [WPC-1 Chapter One IV.A.28(a)]

Conditic No.	on 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. [WPC-1 Chapter One IV.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. [WPC-1 Chapter One IV.A.28(a)]
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. [WPC-1 Chapter One IV.A.28(a)]

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000002 (continued):

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. [WPC-1 Chapter One IV.A.15(c)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000003 (MS0029521-004) Outfall 004 (Unit A Standby Service Water) - INTERNAL:

Limitation Requirements:

Condition No.	n 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. [WPC-1 Chapter One IV.A.28(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). [WPC-1 Chapter One IV.A.28(a)]
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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. [WPC-1 Chapter One IV.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. [WPC-1 Chapter One IV.A.28(a)]
M-3	Flow	Flow: The flow reported shall be the total volume discharged in a 24-hour period. [WPC-1 Chapter One IV.A.28(a)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000003 (continued):

Monitoring Requirements:

Condition No.	Parameter	Condition
M-4	Zinc (Total Recoverable)	Zinc (Total Recoverable): Composite Sampling:
		If the basin has been recirculated for a timeframe 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.
		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. [WPC-1 Chapter One IV.A.28(a)]
M-5	Chlorination Duration	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. [WPC-1 Chapter One IV.A.28(a)]
M-6		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. [WPC-1 Chapter One IV.A.28(a)]
Submitte	al/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. [WPC-1 Chapter One IV.A.15(c)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000004 (MS0029521-005) Outfall 005 (Unit B Standby Service Water) - 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. [WPC-1 Chapter One IV.A.28(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 submitted with the discharge monitoring report (DMR). [WPC-1 Chapter One IV.A.28(a)]
	and the second s	

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. [WPC-1 Chapter One IV.A.28(a)]
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. [WPC-1 Chapter One IV.A.28(a)]
M-3	Flow	Flow: The Flow reported shall be the total volume discharged in a 24-hour period. [WPC-1 Chapter One IV.A.28(a)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000004 (continued):

Monitoring Requirements:

Condition No.	Parameter	Condition
M-4	Zinc (Total Recoverable)	Zinc (Total Recoverable): Composite Sampling
		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.
		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. [WPC-1 Chapter One IV.A.28(a)]
M-5	Chlorination Duration	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. [WPC-1 Chapter One IV.A.28(a)]
M-6		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. [WPC-1 Chapter One IV.A.28(a)]
Submitta	al/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. [WPC-1 Chapter One IV.A.15(c)]

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Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000005 (MS0029521-006) Outfall 006 (Treated Low Volume 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. [WPC-1 Chapter One IV.A.28(a)]
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. [WPC-1 Chapter One IV.A.28(a)]

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. [WPC-1 Chapter One IV.A.15(c)]			

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RPNT000000006 (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 :

Monitoring Requirements:

Condition No. Parameter Condition		Condition
INO.	Farameter	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. [WPC-1 Chapter One IV.A.28(a)]

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. [WPC-1 Chapter One IV.A.15(c)]

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RPNT000000007 (MS0029521-010) Outfall 010 (Total Facility Treated Sanitary Wastewater Discharged to Basin A) - INTERNAL:

Monitoring Requirements:

Conditic No.	on 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. [WPC-1 Chapter One IV.A.28(a)]	
Submi	ttal/Action Require	ements:	
Conditio	on 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. [WPC-1 Chapter One IV.A.15(c)]

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

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RPNT000000008 (MS0029521-011) Outfall 011 (Treated Liquid Rad Wastewater. Contributing sources include Dilute Borated Water) - INTERNAL:

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. [WPC-1 Chapter One IV.A.28(a)]
Submitt	al/Action Requirer	ments:
Condition		
No.	Condition	
S-1	The Permittee shall su	bmit analytical results on a monthly Discharge Monitoring Report (DMR): Due monthly, by the 28th of the subsequent month. [WPC-1

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

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RPNT000000009 (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:

Condition No.	Parameter Condition			
M-1	Zinc (Total Recoverable) Zinc (Total Recoverable): Samples should be analyzed using EPA method 200.8 or an approved equivalent method with an M of 10 micrograms/L. [WPC-1 Chapter One IV.A.28(a)]			
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 entering for mixing with the receiving stream. [WPC-1 Chapter One IV.A.28(a)]			
	l/Action Requirement: Total Recoverable):	S:		
Condition No.	Condition			
S-1	Iron (Total Recoverable): shall be monitored at Outfall 013 on a monthly basis, utilizing 24-hour composite sampling, until 12 monthly samples have been collect Sampling should begin following the effective re-issuance date of this permit and shall be representative of all 4 seasons upon completion. Total Recoverable Iro shall be analyzed using EPA method 200.8 or an approved equivalent method with a MQL of 10 micrograms/L. Once completed, the analytical result and date of all 12 sampling events shall be submitted in a report as required in permit condition S-10 on page 7 of this permit. [WPC-1 Chapter One IV.A.28(a)]			
Condition No.	Condition			
S-2	The Permittee shall submit analytical results on an annual Discharge Monitoring Report (DMR): Due annually by the 28th of January. [WPC-1 Chapter One IV.A.15(c)]			
S-3	The Permittee shall submit an	nalytical results on a quarterly Discharge Monitoring Report (DMR): Due quarterly, by the 28th of Jan, April, July, and Oct. [WPC-1		

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RPNT0000000010 (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:

Condition	and the second s		
No.	Parameter	Condition	
M-1	Zinc (Total Recoverable)	Zinc (Total Recoverable): Samples should be analyzed using EPA method 200.8 or an approved equivalent method with an MQL of 10 micrograms/L. [WPC-1 Chapter One IV.A.28(a)]	
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 entering or mixing with the receiving stream. [WPC-1 Chapter One IV.A.28(a)]	
Submitta	l/Action Requirements		
	ic (Total Recoverabl		
Condition			
No.	Condition		
S-1	collected. Sampling should be Recoverable Arsenic shall be analytical result and date of a	rable) shall be monitored at Outfall 014 on a monthly basis, utilizing 24-hour composite sampling, until 12 monthly samples have been egin following the effective re-issuance date of this permit and shall be representative of all 4 seasons upon completion. Total analyzed using EPA method 200.8 or an approved equivalent method with a MQL of 0.5 micrograms/L. Once completed, the II 12 sampling events shall be submitted in a report as required in permit condition S-10 on page 7 of this permit. Submit a monitoring by years after the permit effective date. [WPC-1 Chapter One IV.A.28(a)]	
Copp	er (Total Recove	rable):	
Condition			
No.	Condition		
S-2	been collected. Sampling sho Recoverable Arsenic shall be	coverable): shall be monitored at Outfall 014 on a monthly basis, utilizing 24-hour composite sampling, until 12 monthly samples have uld begin following the effective re-issuance date of this permit and shall be representative of all 4 seasons upon completion. Total analyzed using EPA method 200.8 or an approved equivalent method with a MQL of 1.0 micrograms/L. Once completed, the Il 12 sampling events shall be submitted in a report as required in permit condition S-10 on page 7 of this permit. [WPC-1 Chapter	

Entergy Mississippi Inc, Grand Gulf Nuclear Station Facility Requirements Permit Number:MS0029521 Activity ID No.: PER20070001

RPNT000000010 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-3	The Permittee shall submit analytical results on an annual Discharge Monitoring Report (DMR): Due annually by the 28th of January. [WPC-1 Chapter One IV.A.15(c)]
S-4	The Permittee shall submit analytical results on a quarterly Discharge Monitoring Report (DMR): Due quarterly, by the 28th of Jan, April, July, and Oct. [WPC-1 Chapter One IV.A.15(c)]

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RPNT0000000011 (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:

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-9 on page 7 of this permit. [WPC-1 Chapter One IV.A.28(a)]

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 neares accessible point following final treatment, but prior to entering for mixing with any other wastewaters. [WPC-1 Chapter One IV.A.28(a)]	
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. [WPC-1 Chapter One IV.A.28(a)]	
Submitta	ll/Action Requirem	ients:	
Condition No.	Condition		
S-1		nit analytical results on an annual Discharge Monitoring Report (DMR): Due annually by the 28th of January. [WPC-1 Chapter One	

GENERAL INFORMATION

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

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
2082	Entergy Operations, Inc.	Official Site Name	4/28/1981	
2802100023	Entergy MS, Grand Gulf Nuclear Station	Air-AIRS AFS	10/12/2000	10000
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	9/5/1997	9/1/2002
042000023	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Construction	8/16/1999	
042000018	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Construction	3/13/1984	3/1/1985
042000018	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-State Operating	4/28/1981	8/28/1981
MSR101071	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Construction	4/30/1998	10/28/1998
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	8/18/1993	7/13/1997
MS0029521	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Water - NPDES	9/19/1997	9/16/2002
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	10/31/2000	2/10/2006
MS0029521	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Water - NPDES	7/24/2003	6/30/2008
042000023	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	Air-Synthetic Minor Operating	6/1/2004	5/31/2009
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	2/10/2006	12/1/2010
2082	Entergy Mississippi Inc, Grand Gulf Nuclear Station	Air-Notification	4/7/2008	
2082 001	Grand Gulf Nuclear, Middle South Energy	GARD	4/21/1981	
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	5/27/2009	
2082	Grabd Gulf Nuclear Station Warehouse	Air-Notification	7/19/2010	
MSR000883	Entergy Mississippi, Inc., Grand Gulf Nuclear Station	GP-Baseline	12/1/2010	9/28/2015
MSR105946	Entergy Mississippi Inc, Grand Gulf Nuclear Station	GP-Construction	5/13/2011	12/31/2015

Basin: Mississippi River Basin - direct dischargers to

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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.

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Air & Water Pollution Control Commission

COMMISSIONERS

Ray Tribble Chairman Monsy James W. Carraway Vica Chairman Bassfield

Board of Health Joe D. Brown

Marine Conservation Commission

W. J. Demoran Charles W. Elm Vazoo City

Game & Fish Commission Berry O. Freeman

W. E. Gupton

STATE OF MISSISSIPPI



Glen Wood, Jr., Executive Director P. O. Box \$27 - Robert E. Lee Building Jackson, Mississippi 39205

Telephones: Administrative Offices 601-354-7513 Air Division 601-354-6783 Water Division 601-354-7661

February 5, 1974

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GENS PROJECT

COMMISSIONERS

Oil & Ges Board Quincy R. Hodges Hermit A Jones Canton

Board of Water Commissioners Jack Pepper

ASSOCIATE MEMBERS State Park System Dr. John M. King

A & I Board Paul Burt Geological Survey W. H. Moure

Mr. Donald C. Lutken, President Mississippi Power and Light Company P. O. Box 1640 Jackson, Mississippi 39205

Dear Mr. Lutken:

This certification is issued to the Mississippi Power and Light Company, Jackson, in conformity with the requirements of Section 401 of the Federal Water Pollution Control Act as amended (33 USC 1341) with respect to the discharge of treated wastewater resulting from the operation of the company's proposed Grand Gulf Nuclear Station near Port Gibson, Mississippi.

After publication of notice of the requested certification in <u>The Clarion</u> <u>Ledger</u>, Jackson, on December 6, 1973, and <u>The Reveille</u>, Port Gibson, on December 6, 1973, the Mississippi Air and Water Pollution Control Commission hereby certifies, after examination of pertinent materials supplied by the company, that no limitations or standards have been established pursuant to Sections 301, 302, 306, or 307 and further that there is reasonable assurance that the proposed activity of the company will be conducted in a manner which will not violate applicable water quality standards.

Very trul Wood, Jr. Cler Executive Director

GWjr:kh

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Attachment D

[Not Used]