

Administrative Procedures Act Rules

Title 11: Mississippi Department of Environmental Quality

Part 6: Wastewater Pollution Control Regulations

Part 6, Chapter 1: Mississippi Commission on Environmental Quality National Pollutant Discharge Elimination System (NPDES) Permits, Underground Injection Control (UIC) Permits, State Permits, Water Quality Based Effluent Limitations and Water Quality Certification

TABLE OF CONTENTS

Subchapter 1 Wastewater Permit Regulations

Rule 1.1.1 General Requirements

- A. Definitions of Terms
- B. Applicability and Required Permits
- C. Permits: Preliminary Determinations and Siting Criteria

Rule 1.1.2 Permit Applications

- A. Permits: Applications, Filing Procedures and Requirements
- B. Permits: Application Exemptions
- C. Permit Applications and Other Forms: Valid Signature
- D. Application Requirements Regarding Toxicity for Existing Discharges
- E. Misrepresentation of Information on Application Forms and Other Reports

Rule 1.1.3 Procedural Aspects of Permit Issuance

- A. Permits: Preliminary Determinations, Draft Permits, Certificates of Coverage and Variances
- B. Public Notice of Draft Permits and Preliminary Determinations
- C. Public Notice and Fact Sheets

- D. Draft Permits: Transmittal to Regional Administrator (or his/her designee), Deficiencies, Additional Data Requirements
- E. Public Access to Forms, Commission Files and Records
- F. Protection of Confidential Information
- G. Draft Permits: Public Hearings
- H. Permit Board Determinations, Issuance or Denial of Permits
- I. Final Permits: Transmittal to EPA

Rule 1.1.4 Terms And Conditions Applicable To Permits

- A. All Permits, Unless Otherwise Noted in Those Regulations or in Federal Regulations Referenced Herein
- B. State Permits Issued to a POW or NPDES Permits Issued to POTW
- C. General Requirements Applicable to State Permits Issued to Concentrated Animal Operations or NPDES Permits Issued to Concentrated Animal Feeding Operations
- D. State No Discharge Permit Issued to a Domestic Wastewater Treatment Facility with a Capacity of 1500 Gallons per Day or Less or NPDES Permits Issued to a Domestic Wastewater Treatment Facility with a Capacity of 1500 Gallons per Day or Less
- E. Administration of State General Permits and NPDES General Permits
- F. NPDES Permits Only
- G. NPDES Mineral Mining and Processing Permits
- H. NPDES Animal Waste Permits Only
- I. Storm Water NPDES General Permits Only
- J. Sewage Sludge Use or Disposal Requirements
- K. UIC Permits
- L. State Permits
- M. Pretreatment Permits
- N. State Permits Issued to Animal Feeding Operations Only

- O. State Mineral Mining and Processing Permits
- P. State Permits for the Disposal of Contaminated Milk
- Q. State Permits for Aerial Applicator Program

Rule 1.1.5 Duration, Review and Reissuance, Transfer, Modification, Termination, Revocation, Enforcement and Property Rights

- A. Duration of Permit
- B. Review and Reissuance of State, UIC, or NPDES Permits: Requests and Filing Requirements
- C. State, UIC, and NPDES Permits: Transfer, Modification, Termination, or Revocation by the Permit Board
- D. Enforcement
- E. Property Rights, All Permits

Rule 1.1.6 Noncompliance Lists, Plans And Specifications: Submittal Requirements, and Severability

- A. Noncompliance Lists
- B. Plans and Specifications: Submittal Requirements
- C. Severability

Subchapter 2: Water Quality Based Effluent Limitations

Rule 1.2.1 Background

Rule 1.2.2 General Requirements

- A. Applicability
- B. General Technical Guidance

Rule 1.2.3 WQBEL Process

- A. Water Quality Based Effluent Limits
- B. Modeling

- C. Calibration Modeling
- D. WQBEL Process Use
- E. WQBELs Apply to Watershed
- F. Quality Assurance

Rule 1.2.4 Waters Difficult to Model

- A. Losing Flow Streams
- B. Lakes
- C. Natural Wetlands
- D. Nutrient Enriched Waters

Rule 1.2.5 Special Cases

- A. Effluent Channels
- B. Ephemeral Streams
- C. Dystrophic Waters
- D. Shellfish Waters

Rule 1.2.6 Toxicity

- A. General
- B. Applicability
- C. Application/Determination of Alternative Chemical Specific Limitations
- D. Toxicity Limits
- E. Procedures for Chemical Specific Screening
- F. Screening Storm Water Discharges
- G. Determining Compliance with Non-Detect or Below Detection Limitations
- H. Attaining Compliance with WQBELs

Rule 1.2.7 Bibliography

Exhibit A to Chapter 1, Subchapters 1 and 2 - Empirical Water Body Model Assumptions for Conventional Pollutants and Conventional Water Quality Models

I. Empirical Stream, Lake, and Estuary Model Assumptions for Conventional Pollutants

- A. $7Q_{10}$ Flow Values
- B. $7Q_2$ Flow Values
- C. Temperature
- D. Velocity
- E. Depth
- F. Slope
- G. K_d (Carbonaceous Deoxygenation Rate)
- H. K_n (Nitrogenous Deoxygenation Rate)
- I. K_a (Reaeration Rate)
- J. Stream Background Conditions
- K. Photosynthesis / Respiration
- L. Sediment Oxygen Demand
- M. Wastewater Inputs
- N. Disinfection
- O. Chlorine Toxicity
- P. Instream Waste Concentration
- Q. Ammonia Toxicity

II. Conventional Water Quality Models

Exhibit B to Chapter 1, Subchapters 1 and 2 - Disinfection Requirements For Sanitary Sewage

- I. Discharge to Waters Classified Public Water Supply
- II. Discharges to Waters Classified Recreation and to Waters of other Classifications with known Recreational Sites
- III. Discharges to Waters Classified Shellfish Harvesting
- IV. Discharges to Waters Classified Fish and Wildlife
- V. Discharges to Waters Classified Ephemeral
- VI. Consistency with Water Quality Standards

Exhibit C to Chapter 1, Subchapters 1 and 2 - Values of Runoff Coefficient C

Exhibit D to Chapter 1, Subchapters 1 and 2 - Bioassay Requirements

- I. Chronic Bioassay Requirements
- II. Acute Bioassay Requirements
- III. Acute Whole Effluent Toxicity Monitoring Requirements
- IV. Chronic Whole Effluent Toxicity Monitoring Requirements

NPDES Whole Effluent Toxicity Testing Report Form Mississippi Office of Pollution Control

Exhibit E to Chapter 1, Subchapters 1 and 2 – Antidegradation Implementation Methodology

- I. Introduction
 - Tier 1 Waters
 - Tier 2 Waters
 - Tier 3 Waters
- II. Applicability of Antidegradation Policy Review Methods
- III. Required Antidegradation Components
 - Project Information
 - Alternatives Analysis
 - Socio-Economic Impacts Analysis

Public Review / Input

Final Action

Antidegradation Instruction Forms

Exhibit F to Chapter 1, Subchapters 1 and 2 – Bibliography

Exhibit G to Chapter 1, Subchapters 1 and 2 – Tier 3 Nomination Documentation Requirements

Subchapter 3 Water Quality Certification of Activities Requiring Federal Licenses or Permits

Rule 1.3.1 Background and General Requirements

Rule 1.3.2 Applications

Rule 1.3.3 Public Notice and Public Hearing

Rule 1.3.4 Scope of Review for Application Decisions

Rule 1.3.5 Enforcement of Certification Decisions and Conditions

Rule 1.3.6 Review and Appeals

Exhibit A to Chapter 1, Subchapter 3 - Criteria for the Siting and Design of Excavated Canals

Exhibit B to Chapter 1, Subchapter 3 - Freshwater and Coastal Marina Guidelines

Exhibit C to Chapter 1, Subchapter 3 - Sand and Gravel Bar Mining in-the-Dry

Exhibit D to Chapter 1, Subchapter 3 - Storm Water Runoff Plan

Exhibit E to Chapter 1, Subchapter 3 - Criteria for certain Existing Coastal Subdivisions
Originally Platted in lands which, because of the passage of the
Federal Act and related Laws and/or Regulations, are presently
Unsuitable For Development

Subchapter 1 Wastewater Permit Regulations

Rule 1.1.1 General Requirements.

A. Definitions of Terms

The applicable definitions set forth in 40 CFR 122, 123, 124, 125, 144, 146, 403 and 503 and all amendments and additions thereto are incorporated herein and adopted by reference and shall be

considered valid in this regulation, unless a term is otherwise defined herein. In addition, the following definitions are applicable.

- (1) "Affected Discharger" is an existing permitted wastewater discharger, or a proposed wastewater discharger, which has either a pending permit application or a permit or is included in a State Revolving Fund ("SRF") Facilities Plan.
- (2) "Allowable Loading" or "available assimilative capacity" is that portion of the loading capacity of a water body that is available for allocating to a point source discharger(s) through regulation by the Department. It is the difference between the loading capacity and the total loading of pollutants from other sources, such as background, nonpoint sources, and exempt sources.
- (3) "Ambient water quality" means the physical, chemical and biological characteristics of waters of the State.
- (4) "Applicant" means a person applying to the Permit Board for an individual State permit, coverage under a State general permit, UIC permit, individual NPDES permit or coverage under an NPDES general permit to discharge wastes or other fluids into the waters of the State, or to operate a treatment works.
- (5) "Application" means either:
 - (a) The uniform NPDES or UIC application form, current at the time application is made,
 - (b) A Notice of Intent form for coverage under an NPDES general permit, or a State general permit, or
 - (c) A State permit application form.
- (6) "Approved methods" means sampling and laboratory testing methods approved by the Department, as specified in Rule 1.1.2 of these regulations.
- (7) "Assimilative capacity" means the capacity of a body of water or soil-plant system to receive wastewater effluent or sludge without violating the provisions of the State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters and these regulations.
- (8) "Background" shall mean the condition of waters in the absence of the activity or discharge under consideration based on the best scientific information available to the Department.
- (9) "Bypass" is defined in 40 CFR 122.41(m), as amended.

- (10) "Bulk storage" means storage of petroleum products, materials and/or liquids with chronic or acute potential for pollution impact on waters of the State at a facility with an above ground storage capacity of more than 1320 gallons or any single container with a capacity greater than 660 gallons.
- (11) "Calibrated and/or verified models" are models whose reaction rates and inputs are significantly based on actual measurements using data from surveys on the receiving water body. Verified models are calibrated to one set of field data and confirmed by comparison to at least one additional set of field data taken under different physical circumstances.
- (12) "Certificate of Coverage" A document issued by the Permit Board or its designee granting coverage under an existing general permit.
- (13) "Code" or "Miss. Code Ann." means the Mississippi Code of 1972.
- (14) "Commission" means the Mississippi Commission on Environmental Quality.
- (15) "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 measurement, the "daily average" is calculated as the average measurement of the discharge of the pollutant over the day.
- (16) "Daily maximum" means the highest "daily discharge" over a calendar month.
- (17) "Department" means the Mississippi Department of Environmental Quality.
- (18) "Dystrophic waters" means receiving water bodies whose natural background conditions do not meet one or more of the State's water quality criteria.
- (19) "Effluent standards and limitations" means all State or Federal effluent standards and limitations on quantities, rates, and concentrations of chemical, physical, biological and other constituents to which a waste or wastewater discharge may be subject under the Federal Act or the State law, including but not limited to, effluent limitations, standards of performance, toxic effluent standards and prohibitions, pretreatment standards and schedules of compliance.
- (20) "Effluent channel" means a man-made discernible confined and discrete conveyance which is used for transporting treated wastewater to a receiving stream or other body of water; provided that such channel has characteristics as follows:

- (a) is contained entirely on property owned (or controlled by easement) by the discharger (to be demonstrated by the discharger),
- (b) does not contain natural waters except when such waters occur in direct response to rainfall events by overland runoff, and
- (c) is so constructed or modified to minimize the migration of fish into said channel.

Effluent channels shall be identified by the Commission and designated on a case-by-case basis prior to permit issuance.

- (21) "Effluent" unless otherwise provided, means treated wastewater flowing out of the treatment facilities.
- (22) "Empirical model" means a mathematical formulation whose various reaction rates and input parameters are determined through empirical formulations based on literature reviews. The simplest empirical model is a dilution model.
- (23) "Ephemeral streams" normally are natural watercourses, including natural watercourses that have been modified by channelization or man-made drainage ditches, that, without the influence of point source discharges, flow only in direct response to precipitation or irrigation return water discharge in the immediate vicinity and whose channels are normally above the groundwater table. These streams may contain a transient population of aquatic life during the portion of the year when there is a suitable habitat for fish survival. Normally, aquatic habitat in these streams is not adequate to support a reproductive cycle for fish and other aquatic life. Wetlands are excluded from this classification.
- (24) "Estuary" means a semi-enclosed naturally existing coastal body of water which has a free connection with the open sea and within which the chloride concentration at the surface is equal to or greater than 1,500 milligrams per liter.
- (25) "Executive Director" means the Executive Director of the Department of Environmental Quality.
- (26) "Fact sheet" means a description of a facility or activity, available to the public, prepared by the Commission staff pursuant to the guidelines, which includes, but is not limited to, information on the location of the discharge, rate or frequency of the discharge, components of the discharge, proposed requirements of the Permit Board regarding the discharge, the location and identification of uses of the receiving waters, water quality standards and procedures for formulation of final requirements on the discharge by the Permit Board.

- (27) "Feasible alternatives" are those alternatives that are available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
- (28) "Federal Act" means the Federal Clean Water Act, or the Safe Drinking Water Act, whichever is applicable; and the applicable regulations promulgated under those statutes.
- (29) "Hazardous Substances" are defined in 40 CFR 116.4, as amended.
- (30) "Instream" means the resulting condition in the water body after mixing with the wastewater(s) at the appropriate critical flow/mixing condition.
- (31) "Interference" The definition of "interference" set forth in 40 CFR 403.3(i) is incorporated herein and adopted by reference.
- (32) "Load Allocation (LA)" means the portion of a receiving water's loading capacity attributed to or assigned to nonpoint sources (NPS) or background sources of a pollutant.
- (33) "Loading capacity" Loading capacity and Total Maximum Daily Load are equivalent terms.
- (34) "Losing flow stream" is a stream which is recharging groundwater.
- (35) "Mailing list" means a list of persons requesting notification and information on public hearings, permits, and other matters and forms.
- (36) "Major facility" means any NPDES "facility or activity" classified as such by the Regional Administrator (or his/her designee) in conjunction with the Executive Director.
- (37) "Man-induced conditions which cannot be controlled or abated" are conditions that have been influenced by human activities, and have the characteristics as follows:
 - (a) would remain after removal of all point sources,
 - (b) would remain after imposition of best management practices for non-point sources, and
 - (c) cannot be restored or abated by physical alteration of the water body; or there is no reasonable relationship between the economic, social and environmental costs and the benefits of restoration or physical alteration.

- (38) "Management agency" means an area-wide waste treatment management agency designated by the governor pursuant to Section 208(a) of the Federal Clean Water Act.
- (39) "Maximum Monthly Average" means the highest "monthly average" over a monitoring period.
- (40) "Maximum Weekly Average" means the highest "weekly average" over a monitoring period.
- (41) The "Method Detection Limit (MDL)" is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
- (42) "Minimum Quantitation Level (MQL)" – is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified calculations, sample weights, volumes, and processing steps have been followed, and also allowing for matrix interference.
- (43) "Mitigation" means the following (in order of preference):
 - (a) avoiding the impact altogether by not taking a certain action or part of an action;
 - (b) minimizing impacts by limiting the degree of magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;
 - (c) rectifying the impacts by repairing, rehabilitating, or restoring the affected environment;
 - (d) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
 - (e) compensating for the impact by replacing, enhancing, or providing substitute resources or environments.

Mitigation for individual actions may include a combination of the above measures.

- (44) "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 calendar month. In computing the geometric

mean for fecal coliform bacteria, the value one (1) shall be substituted for sample results of zero.

- (45) "NPDES form" means any issued permit or any uniform national form prescribed for use by the Commission in the NPDES Program and prescribed in regulations promulgated by the Administrator of EPA, including an NPDES application and a reporting form.
- (46) "NPDES permit" means an individual or general permit issued by the Permit Board pursuant to regulations adopted by the Commission and/or Permit Board under Miss. Code Ann. §§ 49-17-17 and 49-17-29 for discharges into State waters.
- (47) "Natural background" means the condition of waters in the absence of man-induced alterations based on the best scientific information available to the Department. The establishment of natural background for an altered water body may be based upon a similar unaltered water body or on historical pre-alteration data.
- (48) "Non-compliance list" means a list of dischargers, prepared by the Executive Director pursuant to this regulation and the guidelines for transmittal to the Regional Administrator (or his/her designee), who fail or refuse to comply with a condition in an NPDES, Pretreatment or UIC permit issued pursuant to State law.
- (49) "Notice of Intent (NOI) form" means a form used to request coverage under an issued NPDES general permit or an issued State general permit.
- (50) "NPDES general permit" means an NPDES permit written to cover a specified category of similar discharges within a specified geographical or political boundary as described in 40 CFR 122.28(a).
- (51) "Office Head" means the Head of the Office of Pollution Control of the Department of Environmental Quality.
- (52) "Permit Board" means the Permit Board of the Department of Environmental Quality established pursuant to Miss. Code Ann. § 49-17-28.
- (53) "Pass Through" means a discharge which exits a publicly owned treatment works ("POTW") into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, causes a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) and/or causes a violation of Water Quality Standards.
- (54) "Person" means the State or other agency or institution thereof, any municipality, county, political subdivision, public or private corporation, individual,

partnership, association, or other entity, and includes any officer or governing or managing body of any municipality, county, political subdivision, public or private corporation, or the United States or any officer or employee thereof.

- (55) "Pollution" means such contamination, or other alteration of the physical, chemical, or biological properties, of any waters of the State, including change in temperature, taste, color, turbidity, or odor of the waters, or such discharge of any liquid, gaseous, solid, radioactive, or other substance or leak into any waters of the State, unless in compliance with a valid permit issued by the Permit Board.
- (56) "POTW" means a publicly owned treatment works.
- (57) "Pretreatment New Source" The definition of "new source" set forth in 40 CFR 403.3(k) is incorporated herein and adopted by reference.
- (58) "Primary industrial facility" means any industry category listed in the NRDC settlement agreement (Natural Resources Defense Council et. al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976), modified 12 E.R.C. 1833 (D.D.C. 1979)); also listed in appendix A of 40 CFR 122, which is incorporated herein and adopted by reference.
- (59) "Pretreatment system" means any process used to reduce the amount of pollutants in wastewater before discharging the wastewater into a publicly owned treatment works or privately owned treatment works treating non-domestic wastewater.
- (60) "Publicly Owned Treatment Works" is a waste treatment facility owned and/or operated by a public body or a privately owned treatment works which accepts discharges which would otherwise be subject to Federal Pretreatment Requirements.
- (61) "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.
- (62) "Quarterly maximum" means the highest "daily discharge" measured over a three-month period.
- (63) "Reporting form" means the uniform NPDES or UIC reporting form, including subsequent additions, revisions or modifications thereof, promulgated by the Administrator of EPA and prescribed by the Commission for use in administering these regulations, or a State form prescribed by the Commission for use in

administering these regulations, for reporting data and information to the Permit Board by a permittee on monitoring and other conditions of permits.

- (64) "Sewerage Works" means pipelines or conduits, pumping stations, and force mains, and other structures, devices, appurtenances and facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal.
- (65) "State general permit" means a state permit written to cover a specified category of similar facilities within a specified geographical or political boundary.
- (66) "State permit" means an individual or general permit issued by the Permit Board pursuant to regulations adopted by the Commission and/or Permit Board under Miss. Code Ann. §§ 49-17-17 and 49-17-29 for the operation of a treatment works from which no discharge occurs, for discharges into State waters where an NPDES or UIC permit may not be applicable, or for discharges to a publicly owned treatment works where a pretreatment system is utilized.
- (67) "Submitted" means the document is postmarked on or before the applicable deadline, except as otherwise specified.
- (68) "Technology based effluent limitation (TBEL)" means a minimum waste treatment requirement, established by the Department, based on treatment technology. The minimum treatment requirements may be set at levels more stringent than that which is necessary to meet water quality standards of the receiving water body as set out specifically in other sections of these regulations. TBELs shall be federal effluent guidelines if promulgated, otherwise TBELs shall be established in accordance with 40 CFR 125 subpart A, which is incorporated herein and adopted by reference.
- (69) "The State law" means the Mississippi Air and Water Pollution Control Law, specifically Miss. Code Ann. §§ 49-17-1 through 49-17-43, and any subsequent amendments thereto.
- (70) "Total Maximum Daily Load" or "TMDL" means the calculated maximum permissible pollutant loading to a water body at which water quality standards can be maintained. It is the sum of wasteload allocations (WLAs) and load allocations (LAs) for any given pollutant plus a margin of safety in a watershed.
- (71) "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.
- (72) "Trade secret" means information concerning the whole or any portion or phase of any manufacturing proprietary process or method, not patented, which is secret, used or useful in compounding goods having a commercial value, and the secrecy of which the owner has taken reasonable measures to prevent from becoming

available to persons other than those selected by the owner to have access thereto for limited purposes. It shall not be construed for purpose of this regulation to include any information relative to the quantity and character of waste products or their constituents discharged or sought to be discharged into waters of this State, or into any publicly owned treatment works.

- (73) "Treatment works" means any plant or other works, used for the purpose of treating, stabilizing, or holding wastes.
- (74) "UIC form" means any issued permit or any uniform national form used by the Permit Board developed for use in the UIC Program and prescribed in regulations promulgated by the Administrator of EPA including a UIC application and a reporting form.
- (75) "UIC permit" means a permit issued by the Permit Board to a person pursuant to regulations adopted by the Commission and/or Permit Board under Miss. Code Ann. §§ 49-17-17 and 49-17-29 for discharges into underground waters of the State.
- (76) "UIC Program" means the Underground Injection Control program established by the Federal Safe Drinking Water Act.
- (77) "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.
- (78) "Vessel" means any contrivance used or capable of being used for navigation upon water, whether or not capable of self propulsion, including foreign and domestic vessels engaged in commerce upon the waters of this State, passenger or other cargo carrying vessels, privately owned recreational watercraft or any other floating craft.
- (79) "Waste" means sewage, industrial wastes, oil field wastes, and all other liquid, gaseous, solid, radioactive, or other substances which may pollute or tend to pollute any waters of the State.
- (80) "Wasteload allocation (WLA)" means the portion of a receiving water's loading capacity attributed to or assigned to point sources of a pollutant.
- (81) "Water Quality Management Plans" for the purpose of these regulations, Water Quality Management Plans are those plans developed pursuant to Section 208 of the Federal Clean Water Act.

- (82) "Water Quality Standards" the criteria and requirements set forth in State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters. Water quality standards are standards composed of designated present and future most beneficial uses (classification of waters), the numerical and narrative criteria applied to the specific water uses or classification, and the Mississippi antidegradation policy.
- (83) "Water quality based effluent limitation (WQBEL)" means an effluent limitation, which may be more stringent than a technology based effluent limitation, determined as necessary by the Department to ensure that water quality standards in a receiving body of water will not be violated.
- (84) "Water quality criteria" are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports the present and future most beneficial uses.
- (85) "Waters of the State" means all waters within the jurisdiction of this State, including all streams, lakes, ponds, wetlands, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, situated wholly or partly within or bordering upon the State, and such coastal waters as are within the jurisdiction of the State, except lakes, ponds, or other surface waters which are wholly landlocked and privately owned, and which are not regulated under the Federal Clean Water Act (33 U.S.C.1251, et seq.).
- (86) "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.
- (87) "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.
- (88) "Yearly maximum" means the highest "daily discharge" measured over a calendar year.
- (89) "Zone of mixing" or "Mixing Zone" constitutes an area whereby physical mixing of a wastewater effluent with a receiving water body occurs.

B. Applicability and Required Permits

- (1) Proposed discharges and/or proposed discharges into POTWs and/or proposed facilities from which no discharge occurs.

Any person proposing a discharge of wastes to waters of the State or proposing a treatment works from which no discharge of wastes is designed to occur shall file an application in the case of an individual NPDES, UIC, or State permit, at least 180 days prior to the commencement of the activity or, in the case of NOI for coverage under an issued NPDES general permit or coverage under an issued State general permit, in accordance with a schedule established in such permit. For purposes of NPDES permits (with the exception of Storm Water permits), commencement of activity means commencement of discharge. For purposes of Storm Water NPDES individual or general permits, State permits or UIC permits, commencement of activity means commencement of construction.

- (2) Existing discharges and/or existing facilities from which no discharge occurs.

- (a) Any person discharging into waters of the State or to any publicly owned treatment works or operating a treatment works from which no discharge occurs, shall promptly make application for and obtain from the Permit Board a valid NPDES, UIC, or State permit according to procedures and deadlines set forth in these regulations.

- (b)

- (1) Any person discharging wastes into surface waters of the State shall apply to the Permit Board for an NPDES permit, or for coverage under an NPDES general permit.
- (2) Any person discharging wastes or other fluids into underground waters of the State through the use of an injection well shall apply to the Permit Board for a UIC permit, unless otherwise exempted under Rule 1.1.B.
- (3) Any person operating a treatment works from which no discharge of wastes occurs shall apply to the Permit Board for a State permit or for coverage under a State general permit.
- (4) Any person discharging wastes into a publicly owned treatment works and which is subject to Federal pretreatment standards (40 CFR 403), or which, in the opinion of the Permit Board, would cause interference with the proper operation of the publicly owned treatment works, cause violations of water quality standards by passing through the publicly owned treatment works, or cause contamination of sludge which would limit or prevent the proper

disposal of the sludge, shall apply to the Permit Board for a State permit.

- (3) Both existing and proposed discharges and/or existing and proposed facilities from which no discharge occurs shall be subject to the permit application and special NPDES Program requirements contained in 40 CFR 122.21-.37 as of the date the permit is issued, which requirements are incorporated herein and adopted by reference

C. Permits: Preliminary Determinations and Siting Criteria

(1) Preliminary Determinations

- (a)
 - (1) The Permit Board shall strive to minimize the number of permits issued by encouraging the consolidation (regionalization) of separate treatment facilities where technically and economically feasible.
 - (2) When an existing wastewater disposal system is available, no permit shall be issued for a new wastewater treatment facility, unless the permit applicant can demonstrate to the satisfaction of the Permit Board that the wastewater cannot or should not, because of economic or other reasons, be connected to the existing sewage system.
 - (3) Existing wastewater systems treating municipal or domestic wastes shall cease discharge and connect to a regional, municipal or other available sewage system when such system becomes available. The Permit Board, in its discretion, may exclude non-compatible industrial wastes.
- (b) New connections to an existing wastewater collection and treatment system will not be considered unless the existing system is in substantial compliance with permit conditions.
- (c) No permit for the construction or operation of a wastewater treatment facility shall be issued unless the applicant can demonstrate to the satisfaction of the Permit Board that a qualified operator will be made available to operate and maintain the facility.
- (d) All wastewater treatment facilities must be inaccessible to the general public and be identified as a waste treatment facility by signs posted in a reasonable manner.
- (e) The Permit Board may deny a permit if it determines that the discharge from the proposed facility will adversely affect use of the receiving

waters, by unreasonably degrading the same, or will adversely affect public health, welfare or the environment. In making this determination, the Permit Board shall consider the actual use and environs of the receiving waters as well as the effect, if any, of the proposed discharge of effluent upon the actual water quality of the receiving waters.

- (f) No permit application will be processed unless the applicant controls the real property upon which the facility is located. The applicant may demonstrate control through ownership, lease, eminent domain, easement, license, and/or contract.
- (g) It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements and/or agreements, for the construction and operation of the facility, which may be required.
- (h) The Permit Board, at its discretion, may require that all environmental permits, and all permit modifications which require public notice, be prepared for a common public notice and that no permit and/or permit modification will be acted on individually.

(2) Siting Criteria

Unless otherwise provided in these regulations or in a general permit, no permit for a new waste treatment facility, or an expansion to an existing facility, will be issued unless the facility can comply with the following buffer zone requirements. A facility which has previously satisfied buffer zone requirements shall not be required to reestablish compliance with those requirements at the reissuance, modification or transference of the permit or at reconstruction/replacement of the facility, unless the facility proposes expansion.

- (a) The treatment works, unless addressed otherwise in this regulation, must be at least 150 feet from property not owned and/or controlled by the applicant except when the property is zoned for commercial or industrial use, or when the property, dwelling, or commercial establishment is used for commercial or industrial use. The Permit Board may exclude from these requirements treatment units for short-term remediation.
- (b) Domestic wastewater treatment facilities of 1500 gallons per day (gpd) or less must be installed at least ten (10) feet from adjoining property lines. The Permit Board, at its discretion, may require a buffer zone of greater than 10 feet depending upon the type of treatment and site specific information.
- (c) Any facility for the treatment or disposal of animal wastes or the housing of a concentrated and confined animal growing operation (excluding any facility for the housing of broiler pullets, broiler breeders and broilers in a

poultry operation that generates dry litter or waste unless such facility has a continuous overflow watering system) must be at least 1000 feet from the nearest non-owned (by the applicant) occupied dwelling or commercial establishment and at least 300 feet from the nearest adjoining property line. Any facility for the housing of broiler pullets, broiler breeders and broilers in a poultry operation that generates dry litter or waste constructed, significantly enlarged or altered after February 24, 1994 (date of adoption of these regulations) must be at least 600 feet from the nearest non-owned (by the applicant) occupied dwelling or commercial establishment and at least 150 feet from the nearest adjoining property line. In the event new treatment facilities are proposed for an existing confined animal operation, the Permit Board will consider requests for exceptions to, or variances from, the buffer zone requirements, and the requirements of Rule 1.1.1.C.2.e., based upon such factors as the relative distances and age of the existing operation.

- (d) Land application of animal waste (excluding dry litter waste) must be at least 50 feet from the nearest adjoining property line and at least 300 feet from the nearest non-owned (by the applicant) occupied dwelling. Land application of dry litter waste must be at least 25 feet from the nearest adjoining property line and at least 150 feet from the nearest non-owned (by the applicant) occupied dwelling.
- (e) The Permit Board may consider a buffer zone of less than 150 feet for subsurface treated effluent disposal.
- (f) In the event the buffer zone requirements specified in Rule 1.1.1.C.2.a and c. above cannot be met; the Permit Board will consider requests for exceptions to, or variances from, such requirements upon sufficient proof that affected property owners within the subject buffer zone have had timely and sufficient notice of the proposed facility. The buffer zone requirement may be waived by written permission issued by the affected property owners. Any comments received as a result of such notice shall be considered prior to action upon any request for exceptions to, or variances from, the buffer zone requirements. At all times a minimum 10 foot buffer zone is required. The Permit Board may consider the following factors in deciding whether or not a variance and/or exception should be granted:
 - (1) whether a person and/or facility moves within the buffer zone of a treatment facility, previously approved by the Permit Board;
 - (2) the type of land disposal techniques employed, including, but not limited to, subsurface injection of wastes, and the utilization of spray irrigation; and/or

- (3) such other factors as the Permit Board deems appropriate.

(3) Antidegradation

All applicants for new or expanding NPDES permitted discharges to state waters shall comply with MDEQ's Antidegradation Policy and submit an Antidegradation Report as part of the application or reapplication process in compliance with MDEQ's Antidegradation Implementation Methods in Exhibit E.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.1.2 Permit Applications.

A. Permits: Applications, Filing Procedures and Requirements

- (1) All applications for permits shall be on forms prescribed by the Commission and/or the Permit Board. In addition to those forms, the Department may require an applicant to provide a summary of its compliance history and/or present evidence of its financial capability and responsibility.
- (2) A person discharging waste from more than one location shall file a separate application for each discharge location. A single application may be filed for multiple outfalls discharging from a single location, provided the discharge from each outfall is described separately in the application.
- (3) The application shall be prepared in accordance with the requirements set forth in 40 CFR 122.21-.37, 122.44, 124.3(a) and (d) as of the date the permit application is deemed complete, which are incorporated herein and adopted by reference, and in accordance with these regulations.

B. Permits: Application Exemptions

A person discharging or proposing to discharge the following types of wastes shall not be required to apply for a permit from the Permit Board pursuant to this regulation:

- (1) human sewage from vessels;
- (2) water, gas and other materials injected into a well to facilitate production of oil or gas, or fluids derived in association with oil or gas production and disposal thereof in a well where authorized by the State Supervisor of the Oil and Gas Board (this includes wastes from gas plants which are an integral part of production operations, unless those wastes are classified as hazardous wastes, and wastes generated from enhanced recovery operations and hydrocarbon storage facilities);

- (3) wastes or other fluids authorized for injection into a Class V well as defined in 40 CFR 144 and 146;
- (4) storm sewers exempted under 40 CFR 122.26 and not connected to wastewater treatment works, unless a particular storm water discharge has been identified by the Executive Director or the Regional Administrator (or his/her designee) as contributing to a violation of a water quality standard or as a significant contributor of pollutants to the waters of the state;
- (5) any introduction of pollutants from non-point-source agricultural and silviculture activities, including storm water runoff from orchards, cultivated crops, pastures, range lands and forest lands and return flows from irrigated agriculture. The following facilities are excluded from this exemption: discharges from concentrated animal feeding operations set forth in 40 CFR 122.23 and Rule 1.1.4.C. of these regulations, discharges from concentrated aquatic animal production facilities as defined in 40 CFR 122.24, discharges into aquaculture projects as defined in 40 CFR 122.25, discharges from silviculture point sources as defined in 40 CFR 122.27, and any other facility and/or discharge required by these regulations to obtain a permit;
- (6) the application of pesticides consistent with all relevant requirements of FIFRA in accordance with 40 CFR 122.3(h), which is incorporated herein and adopted by reference.

C. Permit Applications and Other Forms: Valid Signature

- (1) An NOI, UIC, individual NPDES permit application form or State permit application form submitted to the Permit Board pursuant to this regulation shall be signed as follows:
 - (a) for a corporation, by a responsible corporate officer, as defined in 40 CFR 122.22(a)(1);
 - (b) for a partnership, by a general partner;
 - (c) for a sole proprietorship, by the proprietor;
 - (d) for a municipal, state or other public facility, by either a principal executive officer, the mayor, or ranking elected official.
- (2) All reports required by permits, and other information requested by the Permit Board shall be signed by a person described in Rule 1.1.2.C., or by a duly authorized representative of that person. A person is a duly authorized representative when:

- (a) the authorization is made in writing by a person described in Rule 1.1.2.C.1.,
- (b) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity including, but not limited to, the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may be either a specified individual or position) and,
- (c) the written authorization is submitted to the Permit Board.

D. Application Requirements Regarding Toxicity for Existing Discharges

- (1) Except as provided in Rule 1.1.2.D.3 below, the following permittees shall submit Whole Effluent Toxicity (WET) test results as part of their application for renewal of their NPDES permits:
 - (a) all major municipal facilities;
 - (b) all municipal facilities which receive a discharge from any industry category identified in 40 CFR Part 403, Appendix C as of the date the permit application is deemed complete which is incorporated herein and adopted by reference;
 - (c) any facility with any historical failure of WET testing;
 - (d) any facility with WET testing requirements in a current permit;
 - (e) all industrial and municipal facilities believed to be causing toxicity to the instream aquatic biota, and/or believed to have the potential to discharge toxics in toxic amounts considering factors which follow:
 - (1) the variability of the pollutants or pollutant parameters in the facility effluent (based on chemical-specific information, the type of treatment facility, and types of industrial contributors);
 - (2) the dilution of the effluent in the receiving water (ratio of effluent flow to receiving stream flow);
 - (3) existing controls on point or nonpoint sources, including total maximum daily load calculations for the water body segment and the relative contribution of the POTW;

- (4) receiving stream characteristics, including possible or known water quality impairment, receiving stream classification, and whether the facility discharges to a coastal water or a water designated as an outstanding natural resource; and
 - (5) other considerations (including but not limited to the history of toxic impact and compliance problems of the POTW), which the Permit Board determines could cause or contribute to adverse water quality impacts.
- (2) The Permit Board may exempt a facility from the application WET testing requirements of Rule 1.1.2.D.1 of this chapter if it satisfies one or more of the conditions that follow:
 - (a) the Department may delay effluent characterization for whole effluent toxicity for existing facilities that are under a compliance schedule in a permit or administrative order to implement technology-based controls or to achieve compliance with water quality-based effluent limits;
 - (b) once-through non-contact cooling water without additives;
 - (c) dewatering of sand or gravel mining operations;
 - (d) sump pump discharges of uncontaminated groundwater or rainwater only;
 - (e) construction dewatering only;
 - (f) discharges from fish hatcheries and other aquaculture;
 - (g) non-POTW facilities discharging only treated domestic wastewater, unless the Department determines the facility has the potential for toxicity;
 - (h) is a seafood processor; or
 - (i) the Department determines that the facility's discharge does not have the potential to contain toxics in toxic amounts.
- (3) Facilities required under Rule 1.1.2.D.1 or 2. to conduct toxicity testing shall use Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027), or most recent edition for acute tests and Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh water Organisms, (EPA/600/4-89/001) or most recent edition for chronic tests. Such testing must be conducted subsequent to the most recent NPDES permit reissuance or permit modification under 40 CFR 122.62(a), whichever occurs later.

- (4) The frequency of whole effluent toxicity testing for an application is defined in Rule 1.2.6 of these regulations.

E. Misrepresentation of Information on Application Forms and Other Reports

- (1) Any person making application for any permit, filing any record, report, or other document pursuant to a regulation of the Commission, shall certify that all information contained in such document is true, based upon information provided by responsible individuals.
- (2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Permit Board pursuant to the State law or the rules and regulations pursuant to such law, shall be subject to the penalties provided for in the Code for perjury or false statements.
- (3) In the event the permittee becomes aware that it failed to submit any relevant facts in a permit application, or in any report to the Department or Permit Board, it shall promptly submit such facts or information.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.1.3 Procedural Aspects of Permit Issuance.

A. Permits: Preliminary Determinations, Draft Permits, Certificates of Coverage and Variances

- (1) When the Executive Director or his/her authorized representative is satisfied that the application is complete, a preliminary determination with regard to the application will be made, including a proposed determination to issue or deny a State, UIC, NPDES permit or coverage under an issued NPDES general permit or under an issued State general permit for the discharge described in the application.
- (2) If the proposed determination is to grant coverage under an issued NPDES general permit or under an issued State general permit, the Permit Board or its designee shall issue a certificate of coverage to the applicant.
- (3) If the proposed determination is to issue a State, UIC, or NPDES permit, additional preliminary determinations shall be made as follows:
 - (a) proposed effluent limitations shall be identified for the constituents proposed to be limited with a supporting rationale (individual storm water permit rationales shall follow the procedures set forth in Rule 1.2.6.E of these regulations);

- (b) a proposed schedule of compliance for meeting the proposed effluent limitations, including interim dates and requirements, if applicable, shall be established (schedules of compliance are impermissible for water quality based limitations, except when new, more stringent standards are adopted); and
 - (c) a description of any other proposed restrictions or other conditions determined necessary or appropriate by the Executive Director or his/her authorized representative which will significantly affect the discharge.
- (4) The Executive Director or his/her authorized representative shall prepare a draft permit based upon the preliminary determinations made pursuant to Rule 1.1.3.A. and C

The draft permit shall be mailed to the applicant for comment, except in the case of an NPDES general permit or a State general permit. In the case of an NPDES or UIC permit, the draft permit shall be mailed to the Regional Administrator (or his/her designee) before public notice of the draft NPDES or UIC permit. The Regional Administrator (or his/her designee) may waive his right to comment on draft permits, except for general permits.

- (5) Any request for variances as defined in 40 CFR 124.62(a) must be submitted pursuant to 40 CFR 124.62(e), which is incorporated herein and adopted by reference.
- (6) The draft permit requirements contained in 40 CFR 124.6(a), (c), (d), and (e) as of the date the application is deemed complete are incorporated herein and adopted by reference with respect to NPDES permits and UIC permits.

B. Public Notice of Draft Permits and Preliminary Determinations

- (1) The Executive Director or his/her authorized representative shall prepare a public notice of a draft NPDES or UIC permit, or a State permit as deemed appropriate by the Permit Board. The notice shall be made in accordance with public notice methods contained in 40 CFR, 124.10(c) and (d) which are incorporated herein and adopted by reference.
- (2) A copy of the notice shall be available at the Department office in Jackson, MS. Any person may forward a written request for a copy of the notice, which will be mailed to him.

C. Public Notice and Fact Sheets

- (1) Public Notice: Contents and Information

A public notice of a draft State, UIC, or NPDES permit shall contain the following:

- (a) the date of posting or publication of the public notice;
- (b) the address and telephone number of the Department office in Jackson;
- (c) the name and address of the applicant, except in the case of a draft NPDES general permit or a draft State general permit;
- (d) a concise description of the activities and operations which result in the discharge identified in the draft permit;
- (e) the name of the receiving waters into which the discharge is being made or is proposed to be made, including the location of the proposed or existing discharge point (in the case of general permits, a description of geographical area and/or allowable receiving waters);
- (f) a concise description of the procedures for the formulation of the final determinations;
- (g) the address and telephone number of the Department office where additional information on the draft permit, copies of the draft permit and fact sheets may be obtained or any other applicable forms and related documents may be inspected or copied; and
- (h) for new or expanding NPDES permitted discharges; a statement concerning antidegradation.

(2) Public Notice: Comment Period for Interested Persons

- (a) Within thirty (30) days following the date of posting or publication of the public notice pursuant to Rule 1.1.3.B., any interested person may submit in writing his views on the draft permit. The time for public comment may be extended by the Permit Board if the Board determines that an extension of time is necessary or appropriate to facilitate additional public comment.
- (b) All views submitted to the Permit Board in writing by interested persons during the comment period shall be retained and considered in the formulation of final determinations on the draft permit by the Permit Board.

(3) Fact Sheets on Draft Permits

- (a) A fact sheet shall be prepared for every NPDES or UIC permit required to have a fact sheet under 40 CFR 124.8(a).
 - (b) The Executive Director or his/her designee may prepare a fact sheet for any existing or proposed discharge if he deems the discharge to be of significant importance to warrant additional information for public comment.
 - (c) A copy of the fact sheet shall be available at the Department office in Jackson, MS. Any person may forward a written request for a copy of the fact sheet, which will be mailed to him.
- (4) Fact Sheets on Draft Permits: Contents and Information
- The fact sheet prepared pursuant to Section C.3. of this Rule shall contain, but is not limited to, the following information:
- (a) A brief description of the type of facility or activity which is subject of the draft permit.
 - (b) A sketch or detailed description of the location of the existing or proposed discharge described in the draft permit. In the case of general permits, a description of geographical areas and/or allowable receiving waters shall be provided.
 - (c) A brief description of the type and quantity of wastes which are proposed to be treated, discharged, or otherwise disposed.
 - (d) A brief summary of the basis for the draft permit conditions including references to applicable statutory or regulatory provisions and appropriate supporting references to the administrative record required by 40 CFR 124.9 (for EPA-issued permits).
 - (e) For NPDES draft permits, a concise citation of water quality standards, effluent limitations and mixing zones, if applicable, to be applied to the discharge and the uses for which the receiving waters have been classified.
 - (f) A complete description of the procedures used by the Permit Board to formulate final determinations on the draft permit and the existing or proposed discharges, including the 30-day comment period on the public notice, procedures for requesting a public hearing on the draft permit pursuant to Section G. of this Rule, and other procedures to facilitate public comment and participation in the formulation of final determinations by the Permit Board.
 - (g) The name and telephone number of a person to contact for further information.

(5) Public Notices, Rationales and Fact Sheets: Mailing Lists

- (a) Any interested person who desires to receive copies of public notices may request that his name be placed on a mailing list of the Permit Board for the information. The request shall be made in writing to the Department office in Jackson, MS, and shall be renewed in December of each year. Failure to renew the request is just cause for the Permit Board to remove a name from the mailing list.
- (b) The written request of any interested person to the Permit Board shall clearly identify the name of the person, the person's address, and the desired documents.

(6) Public Notices and Fact Sheets: Notice to Other Governmental Agencies

- (a) When an NPDES or UIC permit with an existing or proposed discharge into interstate waters is drafted and the Permit Board determines that the discharge may affect the quality of the waters of any other state, the Executive Director or his/her duly authorized designee shall notify any appropriate state or interstate agency of the discharge and shall transmit to the agency a copy of the public notice. Additional information will be submitted upon request of the state and/or interstate agency.
- (b) A state or interstate agency given notice pursuant to Rule 1.1.3.C.6 shall have 30 days in which to comment on the existing or proposed discharge and may submit in writing to the Executive Director or the Regional Administrator (or his/her designee) its views and recommendations. The views and recommendations submitted to the Executive Director by another state or interstate agency may be incorporated into the NPDES or UIC permit if determined by the Permit Board to be necessary or appropriate. If the views and recommendations are not incorporated into the NPDES or UIC permit, the Executive Director shall so notify the commenting agency in writing.
- (c) Upon the posting of a public notice of a draft permit, the Executive Director or his/her duly authorized designee shall transmit a copy of the notice and fact sheet thereon to all agencies and other entities specified in EPA regulations.
- (d) A copy of a public notice or fact sheet, or both, for a draft NPDES or UIC permit shall be sent to any federal, state, or local agency upon written request. The provisions of C.6.b. of this Rule, with regard to opportunity for comment, shall apply to the federal, state, or local agencies.

D. Draft Permits: Transmittal to Regional Administrator (or his/her designee), Deficiencies, Additional Data Requirements

- (1) Upon drafting an NPDES or UIC permit, the Executive Director shall transmit a copy thereof and any other applicable related forms to the Regional Administrator (or his/her designee) for his review and comment in accordance with 40 CFR 123.43 and 123.44. Timely written comments submitted to the Executive Director by the Regional Administrator (or his/her designee) outlining any deficiencies or other changes he deems necessary to complete the permit application shall be considered by the Permit Board. The Permit Board will not issue an NPDES permit over the EPA Regional Administrator's (or his/her designee)'s written objection.
- (2) The Permit Board, in its discretion, or upon request of the Regional Administrator (or his/her designee), may request of an applicant any additional information deemed necessary to complete or correct deficiencies in the application before processing the application or issuing or denying the issuance of a permit. No permit application shall be deemed to be complete and ready for disposition by the Permit Board until all information requested by the Permit Board has been supplied.
- (3) The Commission may take enforcement action as prescribed by the State law or this regulation against any person who fails to either: (1) file a complete application; (2) correct deficiencies in the application; or (3) submit any additional information requested by the Permit Board.

E. Public Access to Forms and Commission Files and Records

A copy of a permit application, (except for an NPDES general permit or a State general permit), public notice, fact sheet, draft permit and other forms relating thereto, including written public comments not classified as confidential information by the Commission under the provisions of Miss. Code Ann. § 49-17-39 shall be available for public inspection and copying during normal business hours at the Department office in Jackson, MS. 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.

F. Protection of Confidential Information

- (1) Pursuant to Miss. Code Ann. §§49-17-39 and 25-61-1 (The Mississippi Public Records Act of 1983), 40 CFR 123.41, and the Commission's Regulation Title 11, Part 1, Chapter 2, *Regulations Regarding the Review and Reproduction of Public Records*, 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 also shall 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 and Regulation Title 11, Part 1, Chapter 2, 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.

- (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 1.1.3.F.1. of this Rule, shall be available for public inspection and copying during normal business hours at the office of the Department in Jackson, Mississippi.
- (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 the entitlement of information to protection as confidential, the Commission shall follow the procedure set forth in Regulation Title 11, Part 1, Chapter 2.

G. Draft Permits: Public Hearings

- (1) Determinations and Scheduling
 - (a) Within the 30-day comment period or other applicable comment period provided after posting or publishing of a public notice pursuant to B. of this Rule, an applicant, any affected state or interstate agency, the Regional Administrator (or his/her designee) or any other interested person or agency may file a petition with the Permit Board for a public hearing on a draft NPDES or UIC permit. A petition for a public hearing shall indicate the reasons why a hearing is requested, the interest in or relationship of the petitioner to the draft permit or existing or proposed discharge identified therein and shall specifically indicate which portions of the draft permit or NPDES or UIC form or information warrants a public hearing. If the Permit Board determines that a petition states sufficient cause or that there is significant public interest in a draft permit for a public hearing, it may schedule such a hearing.
 - (b) The hearing may be held in the geographical location of the proposed discharge or, in the discretion of the Permit Board, at another appropriate location, and shall be noticed at least thirty (30) days before the hearing. The notice of public hearing shall be transmitted to the applicant and shall be published in at least one newspaper of general circulation in the geographical area of the existing or proposed discharge identified on the

draft permit and shall be mailed to any person or group upon request. Notice shall be mailed to all persons and governmental agencies which received a copy of the notice or the fact sheet for the draft permit

- (c) The Permit Board may hold a single public hearing on related groups of draft permits.

(2) Public Hearing Notice Contents

A notice by the Permit Board of a public hearing on a draft permit shall contain in addition to the time and place of the hearing:

- (a) The address and telephone number of the Department office in Jackson, MS, and the name of a contact person.
- (b) The name and address of the applicant whose draft permit will be considered at the public hearing
- (c) The name of the waters of the State to which a discharge, as identified on the draft permit, is or will be made and a concise description of the location of the discharge point. In the case of general permits, a description of geographical area and/or allowable receiving waters shall be provided.
- (d) Reference to the public notice posted and published for the draft permit, including the identification numbers and dates of issuance thereof, if applicable.
- (e) A brief statement of the purpose of the public hearing.
- (f) The address or addresses of Department offices where interested persons may inspect or obtain copies of a draft permit, fact sheet or other applicable forms or other reports, files or information relating to a draft permit subject to public hearing, which has not been declared confidential by the Commission.
- (g) A concise description of the nature of the public hearing and the issues to be heard, with reference to Permit Board rules and procedures to be followed.

H. Permit Board Determinations, Issuance or Denial of Permits.

- (1) In considering an application for a permit issuance or transfer, the Permit Board may consider the applicant's compliance history, financial capability, financial responsibility, or any other aspect of the applicant's history it deems necessary or appropriate.

- (2) The Permit Board, in considering the designee's list of denials for coverage under a general permit, shall hear any request for reconsideration at the next appropriate Permit Board meeting following the issuance of the denial.
- (3) Following review of preliminary determinations or modifications made by the Department pursuant to Rule 1.1.3.B, any comments on the draft permit received by the Executive Director from the Regional Administrator (or his/her designee) pursuant to Rule 1.3.D., comments received from the public during the 30-day comment period following public notice of the draft permit as provided by Rule 1.1.3.C, comments received from the applicant pursuant to Rule 1.1.3.A, other applicable recommendations or determinations and review of the public hearing record after any hearing on a draft permit pursuant to Rule 1.1.3.G.1, the Permit Board shall make a determination to issue or deny the permit. The provisions of 40 CFR 124.17 in effect as of the date the permit is issued regarding response to comments are incorporated herein and adopted by reference.
- (4) Any appeal from the decision of the Permit Board to issue or deny a permit or coverage under an existing permit made pursuant to Rule 1.1.3.H.2 or 3 above, or to a condition of a permit issued, shall be in the form of a request for a formal evidentiary hearing before the Permit Board, in accordance with and subject to Miss. Code Ann. § 49-17-29. All such formal hearings shall be transcribed by a court reporter, and the testimony given shall be under oath.
- (5) Upon completion of any formal hearing convened pursuant to Rule 1.3.H.4 above, the Permit Board shall make a final decision affirming, reversing, or modifying its earlier determination. Any person aggrieved by this final action of the Permit Board may perfect an appeal to the Chancery Court upon the record made at the formal hearing, pursuant to Miss. Code Ann. § 49-17-29.
- (6) An NPDES or UIC permit issued by the Permit Board pursuant to the State law and this regulation is a permit for the purposes of State law. A State permit issued for pretreatment purposes or for the operation of a treatment works from which no discharge occurs, is not an NPDES or UIC permit.
- (7) NPDES and UIC permits issued by EPA, for which the State has issued certification, shall have the same force and effect as if they had been issued by the State under this regulation.

I. Final Permits: Transmittal to EPA

The Executive Director or his/her duly authorized representative shall transmit copies of all NPDES and UIC permits issued by the Permit Board pursuant to the State law and this regulation to the Regional Administrator (or his/her designee) immediately following issuance as agreed upon in the State/EPA Memorandum of Agreement (MOA).

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.1.4 Terms and Conditions Applicable to Permits.

A. All Permits, Unless Otherwise Noted in These Regulations or in Federal Regulations Referenced Herein:

(1) Prohibitions

A permit shall not be issued when any of the prohibitions contained in 40 CFR 122.4 as of the date the permit is issued which is incorporated herein and adopted by reference, are applicable.

(2) Duty to Comply

The permit conditions applicable to all permits contained in 40 CFR 122.41(a)(1), 144.51 and 144.52 as of the date the permit is issued are incorporated herein and adopted by reference.

(3) Permit Conditions and Limitations

The Permit Board shall establish permit conditions and limitations pursuant to 40 CFR 122.43 and 122.44 as of the date the permit is issued, which sections are incorporated herein and adopted by reference. The Permit board shall also require additional or more stringent requirements than promulgated effluent limitations guidelines or standards under Sections 301, 304, 306, 307, 318, and 405 of the Federal Act necessary to:

(a) Achieve water quality standards established under Section 303 of the Federal Act, including State narrative criteria for water quality.

(1) Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants) which the Permit Board determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion from any State water quality standard, including State narrative criteria for water quality. The permittee may utilize testing procedures for the analysis of pollutants set forth in 40 CFR 122, 136, 141, 143, 430, 455, 465, and 503 which are incorporated herein and adopted by reference.

(2) When determining whether a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion from a narrative or numeric criteria within a State water quality standard, the Permit Board shall use procedures which account for existing controls on point and nonpoint sources of pollution, the variability

of the pollutant or pollutant parameter in the effluent, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving water.

- (3) When the Permit Board determines, using the procedures in A.3.a.(2) of this Rule, that a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant.
- (4) When the Permit Board determines, using the procedures in A.3.a.(2) of this Rule, that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the numeric criterion for whole effluent toxicity, the permit must contain effluent limits for whole effluent toxicity.
- (5) Except as provided in this subparagraph, when the Permit Board determines, using the procedures in A.3.a.(2) of this Rule, toxicity testing data, or other information, that a discharge causes, has the reasonable potential to cause, or contributes to an instream excursion above a narrative criterion within an applicable State water quality standard, the permit must contain effluent limits for whole effluent toxicity. Limits on whole effluent toxicity are not necessary where the Permit Board demonstrates in the fact sheet or statement of basis of the NPDES permit, using the procedures in A.3.a.(2) of this Rule, that chemical-specific limits for the effluent are sufficient to attain and maintain applicable numeric and narrative State water quality standards.
- (6) Where the State has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the Permit Board must establish effluent limits using one or more of the following.
 - (i) Establish effluent limits using a calculated numeric water quality criterion for the pollutant which the Permit Board demonstrates will attain and maintain applicable narrative water quality criteria and will fully protect the designated use. Such a criterion may be derived using a proposed State criterion, or an explicit State policy or regulation interpreting its narrative water quality criterion, supplemented with other relevant information which may

include; EPA's Water Quality Standards Handbook, 2nd Edition September 1993, risk assessment data, exposure data, information about the pollutant from the Food and Drug Administration, and current EPA criteria documents.

- (ii) Establish effluent limits on a case-by-case basis, using EPA's water quality criteria, published under Section 307(a) of the Federal Act, supplemented where necessary by other relevant information.
- (iii) Establish effluent limitations on an indicator parameter for the pollutant of concern, provided:
 - (A) the permit identifies which pollutants are intended to be controlled by the use of the effluent limitation;
 - (B) the fact sheet required by 40 CFR 124.56 sets forth the basis for the limit, including a finding that compliance with the effluent limit on the indicator parameter will result in controls on the pollutant of concern which are sufficient to attain and maintain applicable water quality standards;
 - (C) the permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards; and
 - (D) the permit contains a reopener clause allowing the Permit Board to modify or revoke and reissue the permit if the limits on the indicator parameter no longer attain and maintain applicable water quality standards.
- (7) When developing water quality based effluent limits under this paragraph the Permit Board shall ensure that:
 - (i) the level of water quality to be achieved by limits on point sources established under this paragraph is derived from, and complies with all applicable water quality standards; and
 - (ii) effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of

any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.

- (b) Attain or maintain a specified water quality through water quality related effluent limits established under section 302 of the Federal Act;
 - (c) Conform to the conditions of a State certification under section 401 of the Federal Act that meets the requirements of 40 CFR 124.53 when EPA is the permitting authority. If a State certification is stayed by a court of competent jurisdiction or an appropriate State board or agency, EPA shall notify the State that the agency will deem certification waived unless a finally effective State certification is received within sixty days from the date of the notice. If the State does not forward a finally effective certification within the sixty day period, EPA shall include conditions in the permit that may be necessary to meet EPA's obligation under section 301(b)(1)(C) of the Federal Act;
 - (d) Conform to applicable water quality requirements under Section 401(a)(2) of the Federal Act when the discharge affects a state other than the certifying state;
 - (e) Incorporate any more stringent limitations, treatment standards, or schedule of compliance requirements established under federal or State law or regulations in accordance with section 301(b)(1)(C) of the Federal Act;
 - (f) Ensure consistency with the requirements of a Water Quality Management plan approved by EPA under Section 208(b) of the Federal Act;
 - (g) Incorporate Section 403(c) criteria under part 125, subpart M, for ocean discharges;
 - (h) Incorporate alternative effluent limitations or standards where warranted by "fundamentally different factors", under 40 CFR part 125, D;
 - (i) Incorporate any other appropriate requirements, conditions, or limitations (other than effluent limitations) into a new source permit to the extent allowed by the National Environmental Policy Act, 42 U.S.C. 4321, et seq. and Section 511 of the Federal Act, when EPA is the permit issuing authority. (See 40 CFR 122.29(c)).
- (4) When applicable, a permit issued by the Permit Board shall contain terms and conditions deemed necessary or appropriate by the Permit Board to insure compliance with at least the following effluent standards and limitations:

- (a) Effluent limitations for publicly owned treatment works and other discharges, including indirect discharges, when promulgated by the Administrator of EPA pursuant to Sections 204(b), 301, 302, 303, and 307 of the Federal Act, in accordance with and subject to the date of compliance prescribed therein, if the limitations are not in conflict with the State law or the Federal Act.
 - (b) Standards of performance when promulgated by the Administrator of EPA, for new sources within the categories defined in Section 306 of the Federal Act.
 - (c) If the permit is for a discharge from a publicly owned treatment works, standards of performance, pretreatment standards or effluent limitations or prohibitions when promulgated by the Administrator of EPA for toxic substances, monitoring and charges pursuant to Sections 204(b), 307, and 308 of the Federal Act. Toxicity screening and limitations shall be established in accordance with Rule 1.1.2 of these regulations.
 - (d) Any other more stringent limitation deemed necessary by the Permit Board to meet applicable water quality standards, treatment standards or schedules of compliance established pursuant to the State law or regulations promulgated pursuant thereto, or necessary to meet other Federal law or regulations enacted or promulgated subsequent to this regulation, or required to meet any applicable water quality standards including applicable requirements necessary to meet Total Maximum Daily Loads established by and incorporated into the State's continuing planning process required pursuant to Section 303 of the Federal Act.
 - (e) The conditions regarding reissued permits contained in 40 CFR 122.44(l) are incorporated herein and adopted by reference.
 - (f) The effluent limitations promulgated by EPA pursuant to Sections 301, 302, 303, 306, and 307 of the Federal Act shall become immediately enforceable as if a duly promulgated regulation of the Commission.
- (5) Consistency with Water Quality Standards

When a State or an NPDES permit issued by the Permit Board contains any effluent standards or limitations set forth in 1.1.4.A.3. and 4. of this Rule, the Permit Board shall verify that the discharge authorized by the issued permit will not violate applicable water quality standards. When a permit contains additional effluent limitations based upon applicable water quality standards, the Permit Board staff shall prepare a wasteload allocation ensuring that the discharge authorized by the issued permit is consistent with applicable water quality standards, 40 CFR 122.44(a)-(d) (which are incorporated herein and adopted by reference) and Rule 1.1.2 of these regulations.

(6) Requirements to Comply with Plans

The Permit Board, if it deems necessary, may impose any further requirements under the terms and conditions of a State, UIC, or NPDES permit to comply with an area-wide waste treatment management plan, or amendments thereto, prepared by a management agency pursuant to Section 208(b) of the Federal Act, or a facilities plan prepared in accordance with Title II or Title VI of the Federal Act.

(7) Interim Requirements

Prior to promulgation of regulations by the Administrator of EPA relating to applicable effluent standards or limitations or standards of performance set forth in Rule 1.1.4.A.3, the Permit Board may impose any standard, limitation or condition within the State or NPDES permit to ensure compliance with the State law and the Federal Act.

(8) Calculating and Determining Permit Limits

The permit shall contain conditions calculated in accordance with 40 CFR 122.45, which is incorporated herein and adopted by reference. When issuing a State, UIC, or NPDES permit pursuant to the State law and this regulation, the Permit Board shall specify therein, where applicable, average and maximum daily quantitative limitations for the level of wastewater constituents in the authorized discharge in terms of weight and, if appropriate, average or maximum concentration limits.

(9) Schedules of Compliance

(a) A person issued a State, UIC, or NPDES permit by the Permit Board pursuant to Rule 1.1.3.H and who is not in compliance with applicable effluent standards and limitations or other requirements contained therein at the time the permit is issued, shall be required to achieve compliance within a period of time as set forth by the Permit Board, with effluent standards and limitations, with water quality standards, or with specific requirements or conditions set by the Permit Board. The Permit Board shall require compliance with terms and conditions of the permit in the shortest reasonable period of time. For UIC permits, this time shall not exceed three (3) years.

(b) If a time schedule for compliance specified in a State, UIC, or NPDES permit which is established by the Permit Board pursuant to Rule 1.1.4.A.9.a above exceeds one year, the time schedule shall provide for interim target dates for compliance with selected terms and conditions of the permit. Each interim target date specified in the permit shall not exceed one year.

- (c) A discharger who fails or refuses to comply with either an interim or final date of compliance specified in a State, UIC, or NPDES permit may be deemed by the Commission to be in violation of the permit and may be subject to enforcement action prescribed in the State law or this regulation.
- (d) Unless otherwise provided in these regulations, the total length of time for the following to be accomplished shall not exceed three years:
 - (1) the determination that a particular limit is needed,
 - (2) the length of a compliance schedule to achieve that limit, and
 - (3) any instream or other study to determine an alternative limit or water quality criterion
- (e) An NPDES permit may, when appropriate, specify a schedule of compliance leading to compliance with the Federal Act and regulations in accordance with 40 CFR 122.47 which is incorporated herein and adopted by reference.

(10) Compliance Schedule Reports by Dischargers

Within 14 days after either an interim or final date of compliance specified in a State, UIC, or NPDES permit, a 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. Failure to submit the written notice to the Permit Board shall be considered a violation of the compliance requirements of the permit, for which the Commission may be asked to take enforcement action.

(11) Closure Requirements

When issuing a State or NPDES permit pursuant to the State law and this regulation, the Permit Board shall require submittal of a Closure Plan.

- (a) no later than 90 days prior to abandonment and
- (b) within 90 days of decommissioning the treatment works.
The 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 so that no potential environmental hazard to the waters of the State will be presented.

(12) Spill Prevention and Best Management Plans

(a) For facilities which have bulk storage of materials (including but not limited to, all raw, finished and/or waste material), the permit shall contain terms and conditions necessary to prevent the potential release of these materials and storm water contaminated with these materials. Such requirements may include the requirements for a Spill Prevention Control and Countermeasures Plan or a Best Management Plan. For those facilities that have above ground bulk storage not subject to Hazardous Waste Management Regulations or 40 CFR 112 (Oil Pollution Prevention) regulations, secondary containment or equivalent protective measures must be provided for storage of materials and/or liquids with chronic or acute potential for pollution impact on waters of the State regardless of whether it is a raw material, product, waste, or by-product. Secondary containment requirements as found in 40 CFR 112 (for petroleum products), which is incorporated herein and adopted by reference, shall be utilized for these non-petroleum facilities unless an equivalent amount of protection may be provided by measures including 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.

(b) Tank Systems with High Potential for Pollution Impact.

The Permit Board may require permits to contain secondary containment or other engineering practices for tank systems with chronic or acute potential for pollution impact on waters of the State.

(c) The Permit Board may require the development of, and approval of, Best Management Practices Plans addressing any activity at a facility which may impact the environment or compliance with the permit.

(d) Notwithstanding anything in this section to the contrary, the Permit Board may require a facility that has above ground storage of liquids and/or materials with the potential to cause chronic or acute pollution impact on waters of the State (which are not subject to Hazardous Waste Management Regulations or 40 CFR 112 [Oil Pollution Prevention] regulations) to provide either secondary containment or demonstrate an equivalent amount of protection from discharge of pollutants in amounts which have the potential to cause chronic or acute pollution impact if such secondary measures are necessary to protect human health, welfare or the environment.

(13) Compliance with Permit Conditions

All discharges authorized by the permit shall be consistent with the terms and conditions of the permit and the permittee shall make all reasonable efforts to meet any interim or final dates for compliance specified therein.

(14) 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 Rule 1.1.2.A., 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.

(15) Reporting Requirements

- (a) 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);
 - (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); or
 - (3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- (b) 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.
- (c) Monitoring reports. Monitoring results shall be reported at the intervals specified in the permit.
 - (1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) and/or forms provided or specified by the Permit

Board for reporting results of monitoring of sludge use or disposal practices.

- (2) 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.
- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Permit Board in the permit.

(16) Duty to Provide Information

The permittee shall furnish to the Permit Board, within a reasonable time, any 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.

(17) Inspection and Entry

The permittee shall allow any authorized Commission representative to enter upon 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 49-17-29 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.

(18) 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 which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. The Permit Board may require regular reporting of internal operational and maintenance parameters necessary to confirm proper operation of a waste treatment system.

(19) 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.

(20) Bypass

The terms and conditions regarding bypass contained in 40 CFR 122.41(m) are incorporated herein and adopted by reference.

(21) Removed Substances

Solids, sludges, filter backwash, or other residuals removed in the course of treatment or control of wastewaters 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.

(22) Power Failure

If electric power is required, in order to maintain compliance with the conditions and prohibitions of the permit, the permittee shall either:

- (a) 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,
- (b) 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.

(23) Oil and Hazardous Substance Liability

Nothing in a 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 Act or the applicable provisions under Mississippi law pertaining to the transportation, storage, treatment, or spillage of oil or hazardous substances.

(24) Civil and Criminal Liability

- (a) Any person who violates a term, condition or schedule of compliance contained within the permit or the Mississippi Water Pollution Control Law is subject to the actions defined by law.
- (b) Except as provided in permit conditions on "Bypassing" and "Upsets" (A.20 and 27 of this Rule) nothing in a permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.
- (c) 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 the permit.

(25) Severability

The provisions of a permit are severable. If any provision of a permit, or the application of any provision of a 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.

(26) Compliance with Toxic Effluent Standards

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 Act. The permittee shall comply with the applicable provisions of 40 CFR 122.42, which are incorporated herein and adopted by reference.

(27) Upsets

Facilities which experience upset conditions shall meet the conditions of 40 CFR 122.41(n), which is incorporated herein and adopted by reference, as follows:

- (a) 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.
- (b) 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 requirements of 1.1.4.A.27.c. of this Rule 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 a final administrative action subject to judicial review.

- (c) 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).
- (d) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

(28) Monitoring of Discharges Authorized by All Permits: Requirements

- (a) The Permit Board may prescribe monitoring requirements for any discharge authorized by a State, UIC, or NPDES permit issued pursuant to this regulation. A State, UIC, or NPDES permit issued pursuant to this regulation may be subject to such monitoring requirements as may be reasonably required by the Permit Board to determine compliance with permit conditions or State Water Quality Criteria. Such monitoring may include the discharge point, instream monitoring, and, include the installation, use, and maintenance of monitoring equipment or methods including, where appropriate, biological monitoring methods. Ambient instream monitoring may be required by the Permit Board to assure that WQBELs are protective of State water quality criteria through consideration of factors, including, but not limited to, the following:
 - (1) variance to any water quality criteria,
 - (2) the complexity of the receiving water body,
 - (3) magnitude and impact or potential impact of the discharge,
 - (4) amount of available data, and
 - (5) aquatic life and human health concerns.

The Permit Board will normally require the applicant/permittee to provide the necessary information.

- (b) The Regional Administrator (or his/her designee) may require monitoring requirements for reporting and recording of monitoring results contained in 40 CFR 122.48 which are incorporated herein and adopted by reference.
- (c) A discharge authorized by an NPDES permit which the Regional Administrator (or his/her designee) by written request to the Executive Director, requires to be monitored or which contains toxic waste constituents for which an effluent standard or limitation has been established by the Administrator of EPA pursuant to Section 307(a) of the Federal Act, shall be monitored by the permittee for any or all of the following:
 - (1) The measurement of the discharge in gallons per day or other units specified by the Permit Board.
 - (2) Waste constituents subject to reduction or elimination under the terms and conditions of the permit.
 - (3) Specific waste constituents which are determined by the Permit Board to have a significant effect on the quality of the water of the State.
 - (4) Waste or wastewater constituents specified as subject to monitoring by the Administrator of EPA in regulations promulgated pursuant to the Federal Act.
 - (5) Any other specific waste constituents which the Regional Administrator (or his/her designee) may request in writing to be monitored.
- (d) Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(h) of the Federal Water Pollution Control Act, as amended.
- (e) Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored wastewater.
- (f) The frequency of monitoring of a waste discharge required to be monitored pursuant to this regulation shall be specified in a State, UIC, or NPDES permit when issued, except that the Permit Board at any time may require additional monitoring for purposes of determining compliance by so notifying the permittee in writing.

- (g) The requirements regarding the disposal of pollutants into wells, into publicly owned treatment works or by land application contained in 40 CFR 122.50 are incorporated herein and adopted by reference.

(29) Monitoring of Discharges Authorized by All Permits: Recording and Reporting

- (a) A permittee required to monitor a waste discharge pursuant to Rule 1.1.4.A.28 shall maintain records of all information obtained from such monitoring, including the date, place and time of sampling; the dates analyses were performed; the person performing the analyses; the analytical techniques, procedures or methods used; and the results of such analyses. All records and results of monitoring activities, including calibration and maintenance records, shall be retained by the permittee 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. Except for data determined to be confidential under the Mississippi Air and Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department.
- (b) The Permit Board may require a permittee to report periodically the results of all required monitoring activities undertaken by the permittee on an appropriate reporting form supplied by the Permit Board. The Permit Board shall notify the permittee of the frequency of reporting. For State permits and NPDES permits, the monitoring frequency shall not be less than once/year and for Pretreatment permits, the frequency shall not be less than twice/year.
- (c) Upon written request of the Regional Administrator (or his/her designee), the Executive Director shall transmit any reporting form or other monitoring information required by this regulation.
- (d) 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.
- (e) 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.

(3) The Executive Director may waive the written report on a case-by-case basis for reports under paragraph (e).(2) of this rule if the oral report has been received within 24 hours.

(f) Other noncompliance. The permittee shall report all instances of noncompliance not reported under A.29.e. of this Rule, 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 information listed in A.29.(e)(1) of this Rule.

(g) 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.

(30) Testing Procedures for the Analysis of Pollutants for All Permits

Testing procedures include those set forth in 40 CFR 136 which is incorporated herein and adopted by reference or alternative procedures approved and/or promulgated by EPA.

B. State Permits Issued to a POTW or NPDES Permits Issued to a POTW

A State no discharge permit to a POTW or an NPDES permit for a discharge from a POTW shall contain notification requirements as follows:

- (1) Any new introduction of waste or wastewater constituents into the treatment works from a source which would be a new source as defined in Section 306 of the Federal Act if the source were discharging waste constituents.
- (2) Except as to particular categories and classes of point sources or discharges specified by the Permit Board, any new introduction of waste constituents into the treatment works from a source which would be subject to Section 301 of the Federal Act if the source were discharging waste constituents.
- (3) Any substantial change in volume or character of waste constituents being introduced into such treatment works by a source discharging waste into the treatment works at the time of issuance of a permit.
- (4) All new requests for
 - (a) connecting to the POTW's collection system or
 - (b) direct discharge into the treatment system if the new connection/discharge is for industrial non-sanitary wastewater or for any discharge in excess of 25,000 gpd.

C. General Requirements Applicable to State Permits Issued to Concentrated Animal Operations or NPDES Permits Issued to Concentrated Animal Feeding Operations

As part of the conditions for issuance and reissuance of a wastewater treatment permit for concentrated animal feeding operations, the following shall be applicable:

- (1) All animal feedlots, Grade A dairies, poultry operations with 9,000 or more birds, swine operations with 10 or more sows or 50 or more swine, which have been constructed, enlarged or significantly altered after August 15, 1979, or any other animal confinement causing pollution of waters of the State or Grade A dairies needing to reapply to the State Health Department for reissuance of a revoked Health Department permit shall obtain a permit pursuant to these regulations.
- (2) Facilities built before August 15, 1979, are not automatically required to obtain a permit. However, any facility that causes pollution of waters of the state, or places or causes to be placed any wastes in a location where they are likely to cause pollution of any waters of the state or operates a wastewater treatment or disposal system may be required to obtain a permit or coverage under a general permit.
- (3) All facilities that perform concentrated animal feeding operations that meet the federal regulatory requirements of 40 CFR 122.23 shall submit an application

prescribed by the Commission, and shall be issued, upon concurrence by the Permit Board, an NPDES Permit in accordance with 40 CFR 122.23.

- (4) All facilities that perform concentrated animal feeding operations that do not meet the federal regulatory requirement of 40 CFR Part 122.23 shall submit a treatment design worksheet from the Soil Conservation Service or other approvable waste disposal system design. Said design and request for site inspection shall constitute an application for an animal waste disposal permit or for coverage under a general permit.
- (5) The Department shall perform a site inspection prior to presenting the application for consideration to the Permit Board or granting coverage under a general permit. The inspection will determine compliance with siting criteria set forth in Rule 1.1.1.C.2.
- (6) At reissuance, all facilities shall demonstrate that their wastewater treatment facility satisfies the original design capacity.
- (7) General permits may be developed for concentrated animal operations.

D. State No Discharge Permit Issued to a Domestic Wastewater Treatment Facility with a Capacity of 1500 Gallons per Day or Less or NPDES Permits Issued to a Domestic Wastewater Treatment Facility with a Capacity of 1500 Gallons per Day or Less:

As part of the conditions for issuing and/or reissuing a wastewater treatment permit for domestic wastewater treatment facilities of 1500 gpd or less, the following shall be applicable:

- (1) Aerobic mechanical treatment plants to be used in this State must meet the current revision of American National Standards Institute/National Sanitation Foundation (ANSI/NSF) International Standard No. 40 requirements for Class I plants and be listed by the Mississippi State Department of Health in accordance with Miss. Code Ann. § 41-67-10, which is incorporated herein and adopted by reference.
- (2) The following requirements shall be standard conditions for these permits.
 - (a) All aerobic mechanical plants and subsurface systems must be installed by a professional engineer registered in Mississippi or a person who holds a license from the Mississippi State Department of Health pursuant to Miss. Code Ann. §41-67-25, as amended, which is incorporated herein and adopted by reference.
 - (b) All aerobic mechanical plants must be adequately inspected at a frequency as specified in the permit, by an individual holding a Mississippi Wastewater Operators Certificate. The owner of the mechanical plant must provide a copy of the inspection report to the State, along with a

description of corrective actions taken if such actions were needed. Alternatively, the owner may have such inspections and reports completed by an authorized and trained representative of the mechanical plant manufacturer.

E. Administration of State General Permits and NPDES General Permits

- (1) Any facility and/or discharger covered or eligible to be covered under a general permit may be required to obtain an individual State or NPDES permit at the discretion of the Permit Board. Any interested person may petition the Permit Board to take action under this paragraph.
- (2) Any facility and/or discharger covered by a State general permit or an NPDES general permit may request to be excluded from such coverage by applying for an individual State or NPDES permit. The applicability of the general permit is automatically terminated upon issuance of an individual permit.
- (3) Any facility and/or discharger excluded from coverage under a general permit solely because it is already covered under an individual State or NPDES permit may request that the individual permit be revoked and that it be covered by the general permit. If coverage under the general permit is to be approved, the Permit Board or its designee may revoke the individual permit and issue coverage under the general permit simultaneously.

F. NPDES Permits Only

An NPDES permit shall contain the following:

- (1) Reopener Clause. The 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 Act if the effluent standard, limitation, or regulation so issued or approved:
 - (a) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (b) controls any pollutant not limited in the permit.
- (2) Point Source Discharges: Standards of Performance.
 - (a) Any new source subject to an NPDES permit which meets the applicable effluent new source standards of performance as required by the Federal Act, the State law or this regulation, shall not be subject to any more stringent standard of performance for any wastewater constituent during a 10-year period beginning on the date of completion of construction or

during the period of depreciation or amortization of the facility for the purpose of Sections 167 and 169, or both, of the Internal Revenue Code of 1954, whichever period ends first.

- (b) The protection from more stringent standards of performance afforded by subparagraph a. of this rule does not apply to conditions based upon water quality standards, or to toxic effluent standards or prohibitions under Section 307(a) of the Federal Act, or to any other toxic pollutants or hazardous substances not controlled by standards of performance.
- (3) **Permit Requirements for NPDES Permits: Criteria Standards.**
The criteria standards for NPDES permits found in 40 CFR 125, subparts A, B, D, G, H, I, J, M, N, and 40 CFR 129, 133 are incorporated herein and adopted by reference.
- (4) The additional conditions applicable to specified categories of NPDES permits contained in 40 CFR 122.42 are incorporated herein and adopted by reference.

G. NPDES Mineral Mining and Processing Permits

As part of the conditions for issuing a wastewater treatment permit for mineral mining and processing, the following shall be applicable:

- (1) A site inspection shall be performed by the Department to ensure compliance with siting criteria set forth in Rule 1.1.1.C.2.
- (2) The applicant shall demonstrate to the Permit Board it has obtained or filed complete applications for necessary storm water permits or coverages and for mining permits (through the Office of Geology). Failure to obtain or submit complete applications for those permits or coverages shall constitute grounds for denial of the NPDES mineral mining and processing permit.
- (3) **Structural Integrity.**
 - (a) Any lagoon, sedimentation pond, or dredge pit must have an emergency discharge structure installed at least 24 inches above the normal operating fluid level, said discharge structure being at least 24 inches below the lowest point on the top of the containment dike.
 - (b) Dikes and any other appurtenant structures must be constructed utilizing accepted engineering designs, standards, methodologies and materials. A professional engineer registered in the State of Mississippi shall certify the adequacy of construction.
 - (c) Dikes shall be maintained in good working order at all times. There shall be no leaks through dikes. Any damaged dike shall be replaced or

repaired immediately upon discovering any deficiency. All earthen dikes shall be maintained with adequate cover, such that the effects of erosion are minimized.

- (d) The permittee shall develop and maintain a daily inspection log for the facility. This log should include, but not be limited to, the following; condition of all dikes, observance of the area around the dikes to indicate any water pollution problems and the volume of wastewater accumulating within the dike. The date, time and person making the inspection should also be included in this log.

(4) Sand and Gravel Permits. Special Conditions.

When a mining activity is adjacent to a stream, a buffer zone shall be maintained between the edge of the mining activity and the highest point of the top bank of the stream. The buffer zone widths shall be the same as those set forth in Rule 1.3.4.C.3.(a)(1), (2) and (3). The buffer zone shall not be disturbed by any of the facility's activities.

H. NPDES Animal Waste Permits Only

An NPDES animal waste permit shall contain the following (in addition to the requirements set forth in C. of this Rule):

(1) Releases in Excess of the 25-year, 24-hour Storm Event.

Process waste pollutants in the overflow may be discharged to waters of the U.S. whenever rainfall events, either chronic or catastrophic, cause an overflow of process waste water from a facility designed, constructed and operated to contain all process generated waste waters plus the runoff from a 25-year, 24-hour rainfall event for the location of the point source. There shall be no effluent limitations on discharges from detention structures constructed and maintained to contain the 25-year, 24-hour storm event if the discharge is the result of a rainfall event which exceeds the design capacity and proper maintenance is done. Retention structures shall have capacity to contain all process wastewaters plus the 25-year, 24-hour storm event.

(2) Proper Operation and Maintenance Requirements.

The facilities covered by the permit are required to document the attainment of all Best Management Practices (BMPs) used to comply with the effluent limitations in the permit. Where applicable, equivalent measures contained in a site specific Animal Waste Management Plan, if prepared by the U.S. Department of Agriculture Soil Conservation Service (NRCS), may be substituted for the Best Management Practices and Pollution Prevention Plan requirements in the permit. Where provisions in the Soil Conservation Service plan are substituted for

applicable Best Management Practices or portions of the Pollution Prevention Plan, the Pollution Prevention Plan must refer to the appropriate section of the Soil Conservation Service plan. If the pollution prevention plan contains reference to the Soil Conservation Service plan, a copy of the Soil Conservation Service plan must be kept on site.

(3) Best Management Practices.

Animal waste NPDES permits shall contain Best Management Practices (BMPs) at least as stringent as NRCS Manual and all future amendments.

(4) Pollution Prevention Plans.

A pollution prevention plan shall be developed for each facility covered by the permit. Pollution prevention plans shall be prepared in accordance with good engineering practices and should include measures necessary to limit pollutants in runoff. The plan shall describe and ensure the implementation of practices which are to be used to assure compliance with the limitations and conditions of the permit. The plan shall identify a specific individual(s) at the facility who is responsible for developing the implementation, maintenance, and revision of the pollution prevention plan. The activities and responsibilities of the pollution prevention personnel should address all aspects of the facility's pollution prevention plan.

(a) Where a Soil Conservation Service plan has been prepared for the facility, the pollution prevention plan may refer to the Soil Conservation Service plan when the Soil Conservation Service plan documentation contains equivalent requirements for the facility.

(b) The plan shall be signed by the owner or other signatory authority and be retained on site. The plan shall be updated as appropriate.

(5) Preventive Maintenance.

The plan shall include an appropriate schedule for preventative maintenance. Operators will provide routine maintenance to their control facilities in accordance with a schedule and plan of operation to ensure compliance with the permit. The permittee shall keep a maintenance log documenting that preventative maintenance was done. A preventive maintenance program shall involve inspection and maintenance of all runoff management devices (cleaning separators, catch basins) as well as inspecting and testing facility equipment and containment structures to uncover conditions that could cause break downs or failures resulting in discharges of pollutants to surface waters.

I. Storm Water NPDES General Permits Only

Pursuant to 40 CFR 122.26(c), storm water general permits shall require that a Storm Water Pollution Prevention Plan (SWPPP) be submitted with the Notice of Intent (NOI) for coverage unless otherwise addressed in the general permit. The SWPPP shall include, but not be limited to, the information required by the Storm Water NPDES General Permit.

J. Sewage Sludge Use or Disposal Requirements

The use and disposal of sewage sludge shall be in accordance with 40 CFR 503 - Standards for the Use or Disposal of Sewage Sludge, which are incorporated herein and adopted by reference. In the event the use and/or disposal of sludge involve incineration resulting in air emissions, a permit to construct and/or operate will be required in accordance with Regulation Title 11, Part 2, Chapter 2, "Permit Regulation for the Construction and/or Operation of Air Emissions Equipment".

K. UIC Permits

- (1) The UIC program for Class I, III, IV and V wells in the State of Mississippi was approved by EPA and became effective on September 26, 1983. Unless otherwise required herein, all owners or operators of Class I, III, IV or V wells, all applicants for UIC permits, and the Director of the UIC program shall comply with applicable provisions of 40 CFR 144, 146, 147.1250 subpart Z and 148, which are incorporated herein and adopted by reference, except as follows:
 - (a) Where federal regulations use the phrase "for EPA administered programs only," those portions of the federal regulations are not applicable to the Mississippi program and
 - (b) All regulations applicable to Class II wells are excluded from the aforementioned adoption since EPA has granted to the Mississippi State Oil and Gas Board the authority to regulate Class II wells.
- (2) Unless otherwise provided herein, the UIC program shall be operated in compliance with the provisions of 40 CFR incorporated by reference in this paragraph.
- (3) Classification of Injection Wells

Notwithstanding 40 CFR 144.6 and 146.5, for the purposes of these regulations, injection wells are classified as follows:

- (a) Class I.
 - (1) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing,

within five (5) miles of the wellbore, an underground source of drinking water.

- (2) Other municipal and industrial disposal wells (including radioactive waste disposal wells) which inject fluids beneath the lowermost formation containing, within five (5) miles of the well bore, an underground source of drinking water.

(b) Class II. Wells which inject fluids:

- (1) Which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production and may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection.
- (2) For enhanced recovery of oil or natural gas; and
- (3) For storage of hydrocarbons which are liquid at standard temperature and pressure. Notwithstanding parts 3.a. and 3.d. of this rule, naturally occurring radioactive material (NORM) disposal wells are classified as Class II wells provided they meet the specific requirements of the Mississippi State Oil and Gas Board for such types of injection wells.

(c) Class III. Wells which inject for extraction of minerals including:

- (1) Mining of sulfur by the Frasch process;
- (2) In-situ production of uranium or other metals. This category includes only in-situ production from ore bodies which have not been conventionally mined. Solution mining of conventional mines such as slopes leaching is included in Class V.
- (3) Solution mining of salts or potash.

(d) Class IV.

- (1) Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation which within five (5) miles of the well bore contains an underground source of drinking water.

- (2) Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation which within 5 miles of the well contains an underground source of drinking water.
- (3) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to dispose of hazardous waste, which cannot be classified under 40 CFR 146.5 (a)(1) or 40 CFR 146.5 (d)(1) or (2) (e.g., wells used to dispose of hazardous waste into or above a formation which contains an aquifer which has been exempted pursuant to 40 CFR 146.04).
- (e) Class V. Injection wells not included in Class I, II, III, or IV.

Typically, Class V wells are shallow wells used to place a variety of fluids directly below the land surface. However, if the fluids placed in the ground qualify as a hazardous waste under the Resource Conservation and Recovery Act (RCRA), the well shall be considered either a Class I or Class IV well, not a Class V well. Specific types of Class V injection wells are described in 40 CFR 144.81.

(4) Rules and Regulations for Injection Wells

(a) Class I Wells.

- (1) Prohibition of Commercial Hazardous Waste Injection Wells.
In accordance with Miss. Code Ann. Section 17-17-27, Class I hazardous waste wells are prohibited, except such wells located on the generation site of hazardous waste generated in the production of oil or gas or in a commercial or manufacturing operation. Commercial hazardous waste underground injection wells designed or intended to dispose of multiple, non-homogeneous types of wastes from multiple sources other than the owner of the well are prohibited.
- (2) Requirements for a New Class I Well.
 - (i) No person shall receive a permit for a new Class I well when the waste can be reasonably and adequately disposed by other methods.
 - (ii) Factors to be considered in determining whether underground injection or some other method of disposal

should be used shall include, but not necessarily be limited to, the following:

- (A) cost; (disposal methods other than injection wells must be used unless unreasonable costs are demonstrated. Marginal costs shall not be a basis for an injection well.);
 - (B) treatment reliability;
 - (C) effluent quality;
 - (D) stream use classification;
 - (E) indirect environmental impacts (e.g. sludge created, energy used, safety, etc.); and
 - (F) any other factor the Permit Board deems appropriate.
- (3) A person applying for a new Class I permit shall submit a report providing a basis for the injection well. The report shall include:
- (i) a detailed description of the composition of the wastes and the manufacturing process(es) and product(s) producing the wastes;
 - (ii) treatability studies of alternate forms of waste treatment and/or disposal; and,
 - (iii) a detailed explanation of the reasons why each alternative disposal method is considered less satisfactory than the proposed injection well, taking into consideration the factors identified in paragraph b. of this rule.
- (4) A permittee shall continue to investigate alternative treatment and/or disposal technologies and shall discontinue deep well disposal by a schedule approved by the Department if it is determined that these alternative technologies or other technologies are feasible and economically practicable.
- (5) Area of review of Class I Wells. Notwithstanding 40 CFR 146.6, the area of review for all Class I wells shall not be less than a 2-mile radius around the well bore. The Permit Board may specify a larger area of review based on the calculated cone of influence of the well.

- (6) Notwithstanding 40 CFR 146.12, all new Class I wells shall be constructed in accordance with 40 CFR 146.65(c).
- (7) Reporting Requirements for Class I Wells.
 - (i) In addition to the requirements of 40 CFR 144.55, an applicant for a Class I well permit shall identify the location of all known wells within the injection well's area of review which penetrate the injection zone or penetrate to within 300 feet of the top of the injection zone. For such wells which are improperly sealed, completed, or abandoned, the applicant shall submit a corrective action plan as required in 40 CFR 144.55. The plan shall be updated annually, as necessary, to include any improperly sealed, completed, abandoned wells which are identified in the annual report required in part 4.(f)(3) of this rule.
 - (ii) In addition to the reporting requirements of 40 CFR 144.51 (1), the permittee shall report orally to the Department within 24 hours of occurrence, the shutdown of any Class I well which requires down holes maintenance or repair. Excluded from this requirement are normal or expected operational shutdowns and maintenance procedures. Oral notification shall be followed by written notification within 5 days of occurrence.
 - (iii) The permittee shall file annually a report on the following information, to the extent that such information is reasonably available.
 - (A) Locations and depths of newly drilled or newly discovered wells within the area of review which penetrate the injection zone or penetrate to within 300 feet of the top of the injection zone, if such wells were not included in any previously submitted report.
 - (B) Tabulation of data on all wells identified pursuant to subparagraph K.(1) of this paragraph, including:
 - (1) a description of each well's type,
 - (2) construction,
 - (3) data drilled,

- (4) location,
 - (5) depth,
 - (6) record of plugging and/or completion, and
 - (7) any additional information which the Permit Board may require.
 - (8) No UIC permit issued by the Permit Board shall be deemed to allow the permittee to inject any waste not specifically identified in the permit or any waste in any amount greater than the volume or rate specified in the permit. Additionally, no UIC permit for the injection of hazardous waste prohibited from land disposal by the federal Resource Conservation and Recovery Act (RCRA) Land Disposal Rules, 40 CFR 148, shall be issued by the Permit Board until and unless the permit applicant first obtains an exemption from the Land Disposal Rules for that hazardous waste from EPA.
- (b) Class II Wells. In accordance with applicable state and federal regulations and statutes, the Mississippi State Oil and Gas Board has primacy to administer all matters related to the operation of Class II wells in the state.
 - (c) Class III Wells. Permitted Class III wells shall be completed and operated in accordance with standard injection well practices that ensure the protection of USDWs.
 - (d) Class IV Wells.
 - (1) The operation of Class IV wells are banned statewide, with the following exception: Notwithstanding the requirements of paragraphs (a) and (b) of 40 CFR 144.23, Class IV injection wells used to inject contaminated ground water that has been treated and is being injected into the same formation from which it was drawn are authorized by rule for the life of the well if such subsurface emplacement of fluids is approved for cleanup of releases under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601-9675, or pursuant to requirements and provisions under the Resource

Conservation and Recovery Act (RCRA), 42 U.S.C. 6901-6992k or the Mississippi delegated RCRA program.

- (2) Owners or operators of Class IV wells shall notify the Department and EPA of their intent to close any such well at least 30 days prior to its closure.
 - (3) All Class IV wells shall be plugged in a manner acceptable to EPA.
- (e) Class V Wells.
- (1) In accordance with 40 CFR 144.85:
 - (i) As of April 5, 2000, the installation of new large-capacity cesspools and new motor vehicle disposal wells are prohibited statewide.
 - (ii) All motor vehicle disposal wells located within delineated Source Water Protection Areas must be closed by January 1, 2005.
 - (iii) All large-capacity cesspools must be closed statewide by April 5, 2005.
 - (iv) All motor vehicle disposal wells (regardless of their location) must be closed statewide by January 1, 2007.
 - (2) Owners or operators of Class V wells shall notify the Department of their intent to close any such well at least 30 days prior to its closure. Official notification shall consist of submitting a completed Class V Well Pre-closure Notification Form.
 - (3) All Class V wells shall be closed in accordance with applicable plugging and abandonment requirements contained in Title 11, Part 7, Chapter 1, *Surface Water and Groundwater Use and Protection Regulations*. Owners or operators of such wells shall submit a completed Class V Well Decommissioning Form to MDEQ indicating the adherence to proper plugging and abandonment procedures. In addition, the owner or operator must dispose or manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the well in accordance with all applicable Federal, State, and local regulations and requirements.

L. State Permits.

The discharge of any wastewater from a facility operating under a State permit to waters of the State shall constitute a violation of the permit, except as provided in Rule 1.1.4.A.20 and 27, or as authorized under separate permit pursuant to Section 402 of the Federal Act.

M. Pretreatment Permits.

The applicable procedures and requirements set forth in 40 CFR 403 and all amendments thereto are incorporated herein and adopted by reference as applicable to all pretreatment permits except the following:

- (1) 40 CFR 403.5(c) and (d)
- (2) 40 CFR 403.8
- (3) 40 CFR 403.9
- (4) 40 CFR 403.11
- (5) 40 CFR 403.18

In addition, 40 CFR 403.1(b)(i) is amended to provide as follows:

To pollutants from non-domestic sources covered by Pretreatment Standards which are indirectly discharged into or transported by truck or rail or otherwise introduced into public or privately owned treatment works.

Finally, the term "control authority" and/or "POTW" as used in the aforementioned regulation, shall mean the State of Mississippi.

N. State Permits Issued to Animal Feeding Operations Only

The following requirements shall be standard conditions for the issuance and reissuance of State Animal Waste Permits (in addition to those requirements set forth in C. of this Rule):

- (1) Wet
 - (a) The Permit Board shall be notified in advance of the maintenance of any portion of the disposal system which will result in lowering of the efficiency of treatment during such maintenance or in the discharge of untreated waste to any waterway.
 - (b) The permittee must have all necessary structures and/or equipment to prevent any discharge other than that which is in excess of a 24-hour, 25-year rainfall event. Any discharge other than a discharge in excess of the 24-hour, 25-year rainfall event discharge is a violation of this permit.

- (c) The permittee must report once per year on any discharge occurrence. The report must contain date, time, circumstances, and duration of discharge.
 - (d) The permittee must have completed construction within 12 months of date of issuance of this permit. Failure to submit certification of completion of construction, as designed, may result in revocation of permit.
- (2) Dry
 - (a) Dry litter facilities shall have no discharge of process wastewater or contaminated stormwater.
 - (b) The Permittee shall implement an approvable Comprehensive Nutrient Plan.
 - (c) The Permittee must have completed construction within 12 months of date of issuance of this permit. Failure to submit certification of completion of construction, as designed, may result in revocation of permit.

O. State Mineral Mining and Processing Permits.

State No-Discharge permits shall contain as a minimum, the following requirements:

- (1) No Discharge of Wastewater to Surface Water. The discharge of any wastewater from the facility to the waters of the State of Mississippi shall constitute a violation of the permit, except as provided in the permit, or as authorized under separate permit pursuant to Section 402 of the Federal Water Pollution Control Act.
- (2) Structural Integrity.
 - (a) Any lagoon, sedimentation pond, or dredge pit must have an emergency discharge structure installed at least 24 inches above the normal operating fluid level, said discharge structure being at least 24 inches below the lowest point on the top of the containment dike
 - (b) Dikes and any other appurtenant structures must be constructed utilizing accepted engineering designs, standards, methodologies and materials. A professional engineer registered in the State of Mississippi shall certify the adequacy of construction.
 - (c) Dikes shall be maintained in good working order at all times. There shall be no leaks through dikes, any damaged dike shall be replaced or repaired immediately upon discovering any deficiency, and all earthen dikes shall

be maintained with adequate cover, such that the effects of erosion are minimized.

- (d) The permittee shall develop and maintain a daily inspection log for this facility. This log should include but not be limited to the following; condition of all dikes, observance of the area around the dikes to indicate any water pollution problems and the volume of wastewater accumulating within the dike. The date, time and person making the inspection should be included in this log.

(3) Sand and Gravel Permits Special Conditions.

When a mining activity is adjacent to a stream, a buffer zone shall be maintained between the edge of the mining activity and the highest point of the top bank of the stream. The buffer zone widths shall be the same as those set forth in Rule 1.3.4.C.3.(a)(1), (2) and (3) of these regulations. The buffer zone shall not be disturbed by any of the facility's activities.

P. State Permits for the Disposal of Contaminated Milk

All facilities and/or individual(s) needing to dispose of milk that has been classified by the Mississippi State Department of Health as contaminated shall apply for a State permit. As part of the conditions for issuing a waste disposal permit for contaminated milk, the following shall be applicable.

- (1) A contaminated milk disposal plan developed by the Natural Resources Conservation Service (NRCS) utilizing NRCS Contaminated Milk Disposal Guidelines shall be accepted as an application.
- (2) The NRCS contaminated milk disposal plan shall become enforceable requirements of the permit.
- (3) The permittee shall notify the Department prior to each application of contaminated milk. Notification shall consist of verbal communication prior to disposal; followed by written notification within five (5) days.

Q. State Permits for Aerial Applicator Program

- (1) Any person engaged in aerial application originating at a landing strip (including public and private) within the State for the purpose of chemical aerial application shall apply to the Permit Board for a State permit.
- (2) Terms and Conditions of State Permits for Aerial Applicators are listed below:

- (a) Utilization of any surface impoundment for the purpose of collection, storage, and/or treatment of chemically contaminated wastewater generated from operations at an aerial applicator facility is prohibited.
- (b) The discharges of any contaminated hopper low sump wastewater to surface waters or grounds of the facility are prohibited.
- (c) The discharge of rinse water employed to remove chemical residue from the hopper, spray booms, empty chemical containers, and any other auxiliary equipment requiring frequent washing for chemical removal is prohibited.
- (d) The Permit Board may require that all used and/or empty chemical containers be removed from the premises within a reasonable time.
- (e) All empty containers must be triple rinsed prior to disposal in an approved landfill.
- (f) All bulk chemical storage tanks are subject to Best Management Plans in accordance with A.12 of this Rule.
- (g) Any connections from a public water supply to any tanks, sumps, etc., containing pesticides must be made so as to prevent backflow to the potable water system.
- (h) The Permit Board may require additional terms and conditions it deems appropriate to prevent pollution and/or protect human health, welfare or the environment.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.1.5 Duration, Review and Reissuance, Transfer, Modification, Termination, Revocation, Enforcement and Property Rights.

A. Duration of Permit

- (1) The duration of an NPDES permit shall be established in accordance with 40 CFR 122.46, which is incorporated herein and adopted by reference. A State permit issued pursuant to the State law and this regulation may be issued for a period not to exceed five years. A UIC permit shall be issued for a term not to exceed ten years. A person who wishes to continue to operate under a permit which expires shall apply for reissuance of a permit pursuant to C. of this Rule.
- (2) All State permits which have an unspecified term or a term exceeding five years, shall be reevaluated and may be modified and/or reissued for a period not to exceed five (5) years after the date of modification and/or reissuance. Such State

permits may be revoked unless the permittee demonstrates all of the following:

- (a) the wastewater treatment facility can treat the amount of waste it was originally designed to treat,
- (b) the wastewater treatment facility is not accepting more waste than it was originally designed to treat,
- (c) the terms and conditions of the permit meet the current requirements of the Department, and
- (d) the facility is in compliance with the permit terms and conditions.

The Permit Board may establish a schedule for reevaluation, modification and/or revocation of these permits.

- (3) Permits are subject to modification, revocation, and/or reissuance for cause at any time during the life of the permit.

B. Review and Reissuance of State, UIC, or NPDES Permits: Requests and Filing Requirements

- (1) At least 180 days prior to the expiration date of a State, UIC, or individual NPDES permit issued by the Permit Board pursuant to the State law and this regulation, a permittee who wishes to continue to operate under such permits 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. For NPDES general permits and State general permits, the Permit Board will establish in the general permit the schedule for resubmission of a NOI.
- (2) After receipt of an application for reissuance of a State, UIC, or NPDES permit by a permittee, the Permit Board shall review the application and before reissuing a permit shall be assured that:
 - (a) The permittee is in compliance with or has substantially complied with the terms, conditions, requirements, and schedules of compliance of the existing permit.
 - (b) The Permit Board has up-to-date information on the permittee's production levels, waste treatment practices and the nature, contents and frequency of the permittee's discharge.
 - (c) The discharge is consistent with applicable effluent standards and limitations, water quality standards, and other applicable requirements, including any additions to, revisions or modifications.

- (3) The Permit Board shall follow the same procedures in reissuing an NPDES or UIC permit as in issuing one.
- (4) If the applicant submits a timely and complete application or NOI pursuant to subparagraph 1. above, and the Permit Board, through no fault of the applicant, fails to reissue the permit or coverage and/or to act on the application or NOI on or before the expiration date of the existing permit or coverage, the existing permit or coverage shall remain in effect until final action on the permit and/or application or NOI is taken by the Permit Board. The provisions of 40 CFR 122.6(d) are incorporated herein and adopted by reference. In no event shall any permit or coverage remain in effect beyond the expiration date provided in B.6. below.
- (5) A copy of any NPDES or UIC permit reissued by the Permit Board shall be transmitted to the Regional Administrator (or his/her designee) with any appropriate forms or other applicable information relating thereto as agreed upon in the State/EPA Memorandum of Agreement.
- (6) An NPDES general permit or state general permit issued by the Permit Board pursuant to this regulation shall continue in effect beyond its expiration date if, at least thirty days prior to the expiration of the general permit, the Department issues a notice of intent to seek reissuance of the permit (with or without modification) by the Permit Board. The general permit then will remain in effect until the Permit Board takes action on the Department's reissuance request.

C. State, UIC, and NPDES Permits: Transfer, Modification, Termination, or Revocation by the Permit Board

- (1) The applicable procedures and requirements set forth in the following sections of 40 CFR, Parts 122, 124 and 144 and amendments thereto shall be adopted as a part of this regulation and incorporated herein by reference.
 - (a) Part 122.61, except 122.61(b), and Part 144.38, except 144.38(b) - Transfer of Permits.
 - (b) Part 122.62 and Part 144.39 - Modification or Revocation and Reissuance of Permits.
 - (c) Part 122.63 - Minor Modifications of Permits.
 - (d) Part 122.64 and Part 144.40 - Termination of Permits.
 - (e) Part 124.5 - Modification, Revocation and Reissuance, or Termination of Permits.

- (2) In addition to the requirements provided in 1.a. above, Permit transfers are further regulated as follows:
- (a) "Transfer" shall mean any sale, conveyance, or assignment of the rights held by the applicant in any permit issued pursuant to these regulations. Any change of more than 50 percent of the equity ownership of the permit holder over a sustained period which results in a new majority owner shall constitute a transfer. A new majority owner for purposes of this provision shall be an individual, partnership, company, or group of affiliated companies.
 - (b) A permit issued pursuant to these regulations shall not be transferred except upon approval of the Permit Board.
 - (c) A permit transfer shall be approved if the applicant for transfer approval can demonstrate to the Permit Board it has the financial resources, operational expertise and environmental compliance history over the last five years to insure compliance with the terms and conditions of the permit transferred except where this conflicts with State law.
 - (d) The application for approval of the transfer may be combined with an early application for permit renewal.
- (3) If the permittee requests a modification of a State, UIC, or NPDES permit which will neither cause the original compliance schedule to be extended more than four (4) months, nor cause an increase in the effluent limits, the modification may be immediately granted by the Permit Board. The Regional Administrator (or his/her designee) will be advised of any NPDES or UIC permit modification granted pursuant to this subpart.
- (4) If the permittee requests a modification of a state, UIC, or NPDES permit which will cause the original compliance schedule to be extended more than four (4) months, or cause effluent limitations to be less stringent prior to the Permit Board granting such modification of an NPDES or UIC permit, the Regional Administrator (or his/her designee) shall be given a reasonable time as agreed between the State and EPA in which to object in writing and any such objections shall be resolved before the modification is granted.
- (5) 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 notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. Enforcement

- (1) A person who violates any provision of these regulations, a term, condition or schedule of compliance contained within a valid State, UIC, or NPDES permit, or the State law is subject to the actions defined in the State law.
- (2) The Executive Director or his duly authorized designee shall notify the Regional Administrator(or his/her designee) of all violations in accordance with the MOA regarding NPDES or UIC permits and the means by which the Commission proposes to correct or require the correction of such violations in accordance with 40 CFR 123.45.
- (3) It shall not be the defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

E. Property Rights, All Permits

A permit issued by the Permit Board 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.

Source: *Miss. Code Ann. §§ 49-2-1, et seq. and 49-17-1, et seq.*

Rule 1.1.6 Noncompliance Lists, Plans and Specifications: Submittal Requirements, and Severability

A. Noncompliance Lists

The Executive Director shall prepare and submit to the Regional Administrator (or his/her designee) any lists of facilities in noncompliance as defined and required in 40 CFR 123.45.

B. Plans and Specifications: Submittal Requirements

- (1) Plans and specifications for all proposed municipal and domestic sewage collection systems, including modifications and additions thereto, must be submitted to and approved by the Department prior to beginning construction of the proposed system. With the concurrence of the Department, small privately owned domestic collection systems (less than 1,500 gpd) may be allowed to submit plans and specifications prepared by a licensed plumber or architect.
- (2) Except as excluded in Rule 1.1.6.B.5, plans and specifications for all proposed treatment works must be submitted to the Department for comment prior to beginning construction of the proposed works. In addition, plans and specifications for all proposed treatment works for which a Department administered grant or loan has been made or is to be requested must be approved by the Department prior to commencement of construction.

- (3) The Department may exempt domestic wastewater facilities with discharges less than 1,500 gpd. Commercial and institutional establishments installing treatment works which
- (a) have a design capacity of 1,500 gallons per day or less, and
 - (b) do not and will not involve a Department administered grant or loan, and
 - (c) do not require a UIC permit, will normally not be required to submit plans and specifications for the treatment works to the Department.

However, prior to beginning construction, it is required that the Department be advised in writing, of the type and capacity of the system to be constructed, and also the location of the discharge point if applicable.

- (4) The Department's receipt, comment, or approval of any document does not relieve the project's owner, consulting engineer, contractor, equipment supplier, attorney, or any other party of any liabilities or responsibilities. Department approval of or comment on any document does not establish or convey any liability or responsibility to the Department, nor does such represent any assurances that the project will be able to comply with any permit requirements or otherwise perform as intended by the owner, consulting engineer, contractor, equipment supplier, attorney, or other parties. The permittee is responsible for complying with all conditions of a permit and ensuring that all construction, operation, and maintenance activities achieve such compliance.
- (5) All equipment, structures, facilities, and/or systems installed in accordance with B.1., 2. or 6. of this Rule shall be maintained and operated in accordance with A.18 of this Rule.
- (6) Except as excluded in 1.1.6.B.5. of this Rule, not later than 60 days after completion of the project, the owner must, through a letter signed by a professional engineer, certify to the Department that the project has been constructed in accordance with final submitted plans and specifications. Where significant changes to the plans and specification have been made, the professional engineer must submit a list of changes with the certification letter. In addition, as built plans and specifications for all municipal and domestic treatment works, and sewage collection systems, must be submitted to the Department not later than sixty (60) days after completion of the project.
- (7) All plans and specifications submitted to the Department must be developed by a professional engineer who holds a valid certificate of registration as a professional engineer issued by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

- (8) The only permits issued by the Permit Board for wastewater discharges are State permits, UIC permits, and NPDES permits. Review and approval of design plans and specifications does not constitute authorization to begin construction, and any permit applicant who commences construction prior to final Permit Board action under Rule 1.1.3.H. builds at his own risk.
- (9) Plans and specifications shall be developed utilizing fundamental engineering principles and approved engineering practices from acceptable engineering guidance sources including, but not limited to, Recommended Standards for Sewage Works, ("Ten States Standards" and all amendments), text books, manuals of practice, technical publications, or other appropriate publications.
- (10) Plans and specifications that vary from these engineering sources may be submitted if the Department determines such plans and specifications are properly supported in writing by the consulting engineer. A copy of all plans and specifications shall be maintained by the permittee, owner, or operator, whichever is responsible for operation and maintenance of the constructed facilities.
- (11) Any proposed significant changes to approved or submitted plans and specifications must be submitted to the Department for approval or comment in accordance with 1.1.6.B.1. or 2 of this Rule. Approval of or comment on such revised plans and specifications may be secured from the Department either before or after construction is initiated, at the discretion of the owner. If the owner constructs such changes reflected on the plans and specifications prior to securing Department approval or comment, the owner does so at his own risk and may be required by the Department to correct any unacceptable changes and/or deficiencies.

C. Severability

If any provision, section, subsection, sentence, clause or phrase of any of these regulations, or the application of same to any person or set of circumstances is for any reason challenged or held to be invalid or void, the validity of the remaining regulations and/or portions thereof or their application to other persons or sets of circumstances shall not be affected thereby.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Subchapter 2: Water Quality Based Effluent Limitations

Rule 1.2.1 Background

The purpose of this rule is to set forth procedures for the determination of limitations to protect the water quality of the State.

Section 303 of the Federal Act requires the State to develop total maximum daily loads (TMDLs) for pollutants which will ensure the attainment of water quality standards. Load allocations,

wasteload allocations and consequent effluent limitations will be developed consistent with the requirements of Section 303 of the Federal Act and all other applicable State statutes.

Source: Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.2.2 General Requirements.

A. Applicability

In addition to any technology based surface water effluent limitations required under the provisions of Rule 1.1.1 of these regulations, all activities and discharges shall also meet water quality based effluent limitations where necessary to meet water quality standards.

- (1) A water quality based effluent limitation shall be determined by the Department in accordance with this chapter and shall be based upon the characteristics of discharge, the receiving water characteristics, the criteria and standards of the State's Water Quality Criteria and any other information deemed necessary to protect water quality. The applicant may be required to provide the necessary information. Requests for zones of mixing and any previously approved zones of mixing will be taken into consideration when determining WQBELs. In order for a zone of mixing to be provided for any parameter, the applicant must provide the necessary characteristics of the discharge either prior to or within a reasonable time after the Department has made a request for this information from the applicant.
- (2) The Permit Board may decide not to specify limits in permits required for the following:
 - (a) stationary installations created by dredging and/or filling;
 - (b) stationary installations for the discharge of drainage;
 - (c) stationary installations for which best management practices are deemed appropriate; or
 - (d) any other activities the Permit Board deems appropriate.
- (3) For the activities described in paragraph 2, an applicant shall provide the Permit Board with reasonable assurance that the proposed discharge will comply with water quality standards. Reasonable assurance may be based upon the following:
 - (a) scientific studies which may include mathematical water quality modeling and/or biological studies; or

- (b) proposed use of any pollution control technique which assures compliance with water quality standards.

B. General Technical Guidance

- (1) The specific pollutants expected to be in a discharge shall be determined from an effluent characterization provided by the applicant which may be submitted in the appropriate permit application. This characterization may include the long term average and daily maximum pollutant concentrations and the ultimate biochemical oxygen demand (BOD_u) for oxygen demanding waste. See Exhibit A to this Subchapter.
- (2) An evaluation of the impact of a proposed or continued discharge on the water quality of the receiving water body shall be conducted by the Department for all permit applications. The Department shall review applications to determine whether Technology Based Effluent Limitations ("TBELs") as contained in Commission regulations are sufficient to maintain water quality standards in the receiving water body. If TBELs are sufficient, the permit limits will be based on those criteria. If TBELs are not protective of water quality standards, or if additional information or analyses are determined to be necessary to ensure that the effluent will not violate water quality standards in the receiving water body, Water Quality Based Effluent Limitations ("WQBELs") shall be considered.
- (3) The establishment of WQBELs does not alleviate the discharger from complying with all other applicable regulations of the Commission or with the requirements of any other Mississippi, federal, or local law.
- (4) Effluent limitations based upon water quality standards and the provisions of these regulations shall be determined by application of accepted scientific methods. Accepted scientific methods shall be based upon, but not limited to, the following:
 - (a) analysis of the condition of the receiving water body including reasonably expected ambient water quality and present and future flow conditions; and
 - (b) consideration of the nature, volume, and frequency of the existing and/or proposed discharge of waste, under which the cumulative impact of discharge is reasonably expected to be a maximum, including any possible known synergistic effects with other pollutants or substances which may be present in the receiving water body.
 - (c) Nothing in a. or b. above, shall preclude the Department from establishing WQBELs that vary on a seasonal or other basis.

- (5) Sanitary sewage shall be disinfected in accordance with the requirements set forth in Exhibit "B" to this Subchapter which is attached hereto and incorporated herein by reference.
- (6) For determining TBELS, contaminants in intake water shall be handled in accordance with 40 CFR 122.45(g).
- (7) In all cases, the Department shall be responsible for setting final WLAs, LAs, TMDLs, and permit limits and requirements.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.2.3 WQBEL Process.

A. Water Quality Based Effluent Limits

The WQBEL process is a means of determining the available assimilative capacity of a water body and setting WQBELs utilizing appropriate procedures for simulation and prediction of water quality impacts. This process will be used unless the Department determines there are adequate data to support a determination that the receiving water body currently meets water quality standards and will continue to meet water quality standards with the discharge. Computer models utilized include those approved and supported by the Commission and/or EPA. The methodologies used for the WQBEL process are found in Exhibit A to this Subchapter and in Rule 1.2.4 of this chapter. In the event the receiving water body's minimum flow value used for allocation purposes is zero, permit limitations shall be modeled with the flow equal to the effluent for conventional pollutants unless otherwise provided in these regulations. The minimum CBOD model input for WQBEL permit limit determination will be equivalent to the estimated background conditions for streams (2.0 CBODu) as indicated in Exhibit A.I.J.2. The permittee may provide the necessary scientific information to support a less stringent limit.

B. Modeling

Unless actual data or circumstances indicate otherwise, computer modeling is suitable for developing effluent limitations in water bodies for the cases that follow:

- (1) sanitary wastewater having an effluent CBOD₅ limitation of 30 mg/l to 45 mg/l and/or an effluent CBOD₅ limitation as defined secondary or equivalent secondary requirements;
- (2) sanitary wastewater having an effluent CBOD₅ limitation of less than 30 mg/l but greater than or equal to 2 mg/l;
- (3) all effluent limits developed because of the threat of, or potential for, water quality impacts due to toxicants;

- (4) some oxygen demanding wastewaters, other than sanitary wastewater, which are generated by industrial processes.

The State's specific conventional point source water quality modeling and WLA criteria, including specific chlorine and ammonia requirements, are located in Exhibit A to this Subchapter which is incorporated herein and adopted by reference.

C. Calibration Modeling

Calibration modeling and/or verification modeling and/or a water quality field assessment (including physical, chemical, and/or biological water quality surveys) may be required for the determination of WQBELs because of the consideration of factors as follows: the complexity of the receiving water body, magnitude and impact or potential impact of the discharge, amount of available data, aquatic life and/or human health concerns, and any other factor deemed necessary by the Permit Board to protect water quality. The applicant may be required to provide the necessary information.

D. WQBEL Process Use

The WQBEL process may be utilized to determine new discharge permit limits and to evaluate permit renewals when: a. the Department determines existing water quality data is insufficient to evaluate expected water quality impacts, b. the Department determines the available assimilative capacity of the water body is being completely utilized, either alone or in combination with other discharges (including both point and nonpoint sources), c. the Department determines water quality standards are being violated, or d. when the permittee so chooses (except for the purpose of delaying implementation of a particular permit limit). The Department may reissue permits which contain existing permit requirements if the data are adequate to support that the receiving water body currently meets and will continue to meet water quality standards.

E. WQBELs Apply to Watershed

When a WQBEL process is determined to be necessary, the analysis shall consider and determine WQBELs for the permit applicant considering all affected discharger(s) to the receiving water body, including both point and nonpoint sources.

F. Quality Assurance

When an applicant is developing and/or conducting a verified and/or calibrated model and/or conducting a water quality field assessment in the WQBEL process for submittal to the Department, the applicant shall:

- (1) Provide the Department a copy of the Quality Management Plan (QMP) for the entity performing the work. The QMP should be consistent with the most current version of EPA's *Requirements for Quality Management Plan*, EPA QA/R-2.

- (2) Coordinate with the Department to determine the information required, including accepted methods of data collection and analyses, and quality control/quality assurance requirements.
- (3) Use this information to help develop a Quality Assurance Project Plan (QAPP), or its equivalent. The QAPP must be approved in writing by the Department prior to beginning work.
- (4) Failure to comply with the QAPP may result in the Department's rejection of some or all of the data.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.2.4 Waters Difficult To Model.

A. Losing flow streams.

Many losing flow streams can and should be modeled to determine effluent limitations. Such models are only applicable to the point of zero flow.

B. Lakes.

- (1) Computerized and/or ecological type models may be used, if appropriate and available.
- (2) For existing discharges, current effluent limits may be appropriate, if ambient water quality data indicate water quality standards are met and no nuisance conditions associated with the discharge exist.
- (3) Nutrient budget models may be used to determine if nutrient reductions are needed. Nutrient contribution and abatement from both point and nonpoint sources shall be considered.
- (4) Discharges to embayments and coves shall be evaluated on a case-by-case basis. However, effluent limitations more stringent than TBEL may be required.
- (5) Diffuser outfalls for discharges to the main body of a lake may be required when needed to eliminate localized water quality impacts.
- (6) Permit limitations for toxicants shall be determined based upon State, and/or EPA recognized, procedures and best professional judgment in accordance with applicable law.

C. Natural Wetlands

- (1) In the absence of site specific water quality standards, effluent limitations for discharges to swamps, marshes, bogs, wetlands, etc., shall be determined based upon potential or existing physical, chemical, and biological water quality impacts.
- (2) Discharges of sanitary or other oxygen demanding wastewater to natural wetland areas must, at a minimum, meet secondary treatment standards.
- (3) The permittee may be required to monitor biological health of the wetland and the water quality of the receiving wetland (pre and post - permitting).
- (4) No toxic substances shall be discharged in amounts that violate the State's Water Quality Standards.
- (5) For industrial discharges, the ultimate oxygen demand of the wastewater shall also be considered when developing permit limitations. Limits equivalent to 30 mg/l BOD₅ or less shall be given to industrial discharges of oxygen demanding wastewater to natural wetlands.

D. Nutrient Enriched Waters.

In case of nutrient enriched waters, data from a water quality field assessment and/or appropriate models shall be used to determine impact and set effluent limitations.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.2.5 Special Cases.

A. Effluent Channels.

- (1) The standards set forth in the State's Water Quality Standards do not apply to effluent channels.
- (2) Water in effluent channels shall be maintained at a quality which shall prevent the occurrence of offensive conditions, protect public health, and allow (after mixing) maintenance of all standards applicable to all downstream waters.

B. Ephemeral Streams.

Effluent limits for ephemeral streams shall be established consistent with the State's Water Quality Standards.

- (1) Discharges from a POTW must, at a minimum, meet secondary treatment requirements. Industrial discharges must at a minimum meet TBELs.

- (2) Alternative methods may be utilized to determine the potential toxic effect of ammonia.
- (3) Water in ephemeral streams shall be maintained at a quality which shall prevent the occurrence of offensive conditions, protect public health, and allow (after mixing) maintenance of all standards applicable to all downstream waters.

C. Dystrophic Waters.

- (1) Reasonable alternatives, including but not limited to, no discharge and land application, shall be considered prior to allowing a new discharge or continuation of an existing discharge.
- (2) Effluent limitations shall be set to allow a degradation of no more than 10% of the background concentration when the background dissolved oxygen is at or below the State's minimum dissolved oxygen criterion.
- (3) Discharges shall not increase toxicants above background concentrations for those waters whose background exceeds the Water Quality Standards due to natural or irretrievable man-induced conditions.

D. Shellfish Waters.

Waters classified as shellfish waters are generally classified to protect commercially or recreationally harvestable shellfish resources. The Permit Board shall insure that permitted discharges are located and have effluent limits such that impacts or potential impacts on the use of shellfish waters shall be consistent with the National Shellfish Sanitation Program. For areas with existing dischargers that impact shellfish water, other alternatives may be considered.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.2.6 Toxicity.

A. General

- (1) Purpose and Scope. The purpose of this rule is to set forth a realistic and cost effective procedure to screen, evaluate and reduce toxicity of wastewater discharges. Additionally, the procedures described herein are designed to ensure compliance with the Federal Act.
- (2) Summary of Procedure. Mississippi uses a three-step approach to toxicity reduction. Step one involves a detailed review of the permit application and any historical bioassay data and the use of specific screening procedures. The purpose of this step is twofold. First of all, the Department identifies the universe of those facilities which have discharges which are potentially toxic in stream. The Department screening procedures evaluate a discharge's potential acute, chronic,

and human health impact on the receiving stream. Secondly, the Department determines whether the data in an application have been submitted in strict adherence with EPA accepted analytical procedures with all of the appropriate parameters reported.

The second step involves the development of permit limits in accordance with accepted state and national water quality criteria for those facilities exhibiting potential toxicity. Permit limits may take the form of chemical specific and/or whole effluent toxicity based limits.

The third step in the process involves additional testing and actual toxicity reduction for those facilities which fail any whole effluent toxicity requirements included in their permits. Permits addressing whole effluent toxicity have specific language requiring the permittee to perform a Toxicity Reduction Evaluation (TRE) upon non-compliance with the whole effluent toxicity limitations contained in the permit.

B. Applicability.

(1) Chemical Specific Application Data Requirements.

(a) These procedures apply to the review of industrial and municipal applications for NPDES permits and pretreatment permits for the permittees which follow:

- (1) all primary industries (major and minor);
- (2) all major facilities; and
- (3) all industrial and municipal facilities for which the application review indicate parameters above accepted quantitation levels.

(b) Until such time as the Administrator of EPA promulgates, and the Commission prescribes, an NPDES application form for municipal facilities that addresses section 307(A) toxics, municipalities shall submit as part of their application the appropriate pages from EPA Form 3510-2C. Municipalities shall determine the toxic characteristics of their wastewater by analyzing for the toxic pollutants listed in Table III of Appendix D of 40 CFR 122 which is incorporated herein and adopted by reference. Metal analysis shall be for total recoverable metals. Additionally, municipalities shall analyze for total hardness (mg/l as CaCO₃) and any Section 307(A) toxic listed in an industrial user's pretreatment permit for any industrial category identified in 40 CFR 403, Appendix C which is incorporated herein and adopted by reference. Municipalities shall submit two influent and two effluent samples

collected each month during the six-month period immediately preceding the application submittal deadline date.

(2) Whole Effluent Toxicity Application Data Requirements.

- (a) The Whole Effluent Toxicity (WET) test requirements for an application for renewal of applicable NPDES permits are set forth in Rule 1.1.2.D.
- (b) Permittees required to perform WET tests as part of their application under Rule 1.2.6.B.2.a shall conduct at least four WET tests in the year preceding filing of the application. These tests will include two samplings, one during the hot-dry season and one during the cold-wet season. If the receiving water salinity is less than 1,000 mg/l then freshwater testing organisms shall be used. If the Instream Waste Concentration (IWC) at low flow is less than one percent, the permittee shall perform 48-hour, static non-renewal, definitive (a control and five effluent concentrations) acute WET tests at 25°C using *Ceriodaphnia dubia* (invertebrate) that are less than 24 hours old and a 96-hour, static renewal (tests that exceed 48 hours in duration must be renewed), definitive acute WET test at 25°C using *Pimephales promelas* (vertebrate) that are less than 24 hours old. If the IWC at low flow is greater than or equal to one percent, the permittee shall perform chronic WET tests. These shall be definitive static renewal tests at 25°C using *Ceriodaphnia dubia* and *Pimephales promelas*. Acute tests shall be performed in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027), or most recent edition and chronic tests shall be performed in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-89/001) or most recent edition. If the receiving water salinity is greater than or equal to 1,000 mg/l, then saltwater organisms shall be used. If the IWC at low flow is less than one percent, the permittee shall perform 48-hour, static non-renewal, definitive acute WET tests at 25°C using *Americamysis* (invertebrate) that are 1-5 days old and a 96-hour, static renewal, definitive acute WET test at 25°C using *Menidia beryllina*. If the IWC at low flow is greater than or equal to one percent and the receiving water salinity is greater than or equal to 1,000 mg/l, the permittee shall perform short-term chronic WET tests at 25°C using *Americamysis* and *Menidia beryllina*. Acute tests shall be performed in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027), or most recent edition, and chronic tests shall be performed in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028), or most recent edition. All of the above mentioned manuals are incorporated herein and adopted by reference. MDEQ will allow a six-

month grace period for implementation of tests procedures described in the most recent edition of the methods manuals. During this permit, MDEQ will accept test results derived using either procedure, provided the tests are conducted properly. The Permit Board may also require appropriate tests on a plant species, if it deems necessary to protect human health, welfare, or the environment.

- (c) The Permit Board may require WET testing as a condition of a permit application, as a condition of an NPDES permit, or as a condition of a regulatory order. In the case of a permit modification, WET testing may be required after the implementation of the modification. In addition, a modified application may be required for evaluation of toxicity.

C. Application/Determination of Alternative Chemical Specific Limitations

- (1) The Permit Board shall issue NPDES permits with limits based on total recoverable metals, when appropriate, as specified in 40 CFR 122.45, which is incorporated herein and adopted by reference.
- (2) Alternative Chemical specific limitations for permits shall be calculated in accordance with the methods set forth below.
 - (a) The first method is the establishment of a site specific Biological Translator that relates the existing water quality standard to a specific permit limit using the water effects ratio (WER) procedure described in Interim Guidance on Determination and Use of Water Effects Ratios for Metals February 1994 EPA No. 823-B-94-001, Streamlined Water-Effect Ratio Procedure for Discharge of Copper March 2001 EPA No. 822-R-01-005 or the most recent edition.
 - (b) The second method, applicable to metals, is the development of a Chemical Translator using site specific data to determine the dissolved fraction of the permitted metals. The water quality criterion is then divided by the dissolved fraction to provide a value to be used in the WLA. Two methods are available to the permittee for calculating the dissolved fraction.
 - (1) The dissolved fraction may be calculated from site specific Total Suspended Solids (TSS) data and partitioning coefficients listed in the Technical Guidance Manual for Performing Wasteload Allocations. Book II: Streams and Rivers. Chapter 3 (EPA-440/4-84-022) which is referenced in the bibliography (Exhibit F to this Chapter).

- (i) The Linear Partition Coefficient is calculated from Table 5-4 in the Technical Guidance Manual using the following formula:

$$K_p = K_{po} * TSS^a$$

Where: K_p = Linear Partition Coefficient
 K_{po} = Regression Coefficient (from table)
 TSS = Total Suspended Solids Concentration (site specific 15th percentile)
 a = Exponent Constant (from table)

- (ii) The Dissolved Fraction is then calculated as follows:

$$\frac{C}{C_T} = \frac{1}{1 + K_p * TSS * 10^{-6}}$$

Where: C/C_T = Dissolved Fraction of metal

- (2) Alternately, the permittee may determine the dissolved fraction directly by analyzing paired samples of site water for dissolved and total recoverable metals using EPA's "clean" analytical techniques and sampling procedures. This determination may be made in one of two ways.
- (i) Collect four paired samples during the low flow period, defined as no greater than twice the $7Q_{10}$, analyze paired samples of site water for dissolved and total recoverable metals using EPA's "clean" analytical techniques and sampling procedures, take the arithmetic mean of the four analyses, and calculate the dissolved fraction based on the mean values for dissolved and total recoverable metals.
- (ii) Collect 20 paired samples on randomly selected dates throughout the year, analyze as described in (2)(i) above, calculate the dissolved fraction for each sampling, and use the 95th percentile highest dissolved fraction.
- (3) The permittee is responsible for providing all the site specific data needed for these calculations.
- (c) The third method is to assume that there is no difference between the dissolved and total recoverable metals concentrations.

- (3) If the permittee opts to utilize methods a. and b. listed above, the results from method a. will be applied since it is a more comprehensive procedure compared to the relatively simple calculation of the dissolved fraction.
- (4) If the permittee does not opt to utilize methods a. or b., method c. shall be applied.
- (5) The application of any translator derived limitation does not preclude the demonstration of toxicity requirements for other toxicants through the use of WET tests as specified in the permit.

D. Procedures for Chemical Specific Screening.

- (1) Review data submitted with application (e.g. NPDES - 2C, 2D and 2E, Pretreatment - State No Discharge Application)

Identify every toxic parameter in the permit and/or application above quantitation levels¹ and set up a table for each outfall, listing for each parameter the following²:

- (a) maximum concentration;
- (b) maximum 30-day average;
- (c) long term average; and
- (d) number of samples.

The following calculation conventions shall be utilized when using data reported as non-detect or less than detection:

- (1) Non-detect (ND) or less than at the appropriate quantitation levels
- use zero.
- (2) If all data in the permit application are below quantitation levels, the permittee should list the individual non-detect value with the highest detection level reported as the maximum and not calculate an average.

The Department will not consider an application complete if the concentrations required are reported as "N.D." (Not Detected) unless a

¹Where application form data are reported as "less than" (<) compare the method detection limit (MDL) as defined in Appendix B of 40 CFR 136 which is incorporated herein and adopted by reference. MDLs will be utilized in determining the reasonable potential of a given pollutant to violate water quality criteria. If a pollutant is reported as "non-detectable" above the MDLs as defined in Appendix B of 40 CFR 136, the pollutant will be assumed to be present at that reported level of sensitivity.

²Note in some cases parameters limited by the permit may be below the minimum quantitation level.

chemical by chemical listing of the quantitation levels used is provided with the application.

(2) Calculate/Determine Permit Limits.

Technology/federal guidelines based permit limits are calculated using current facility data and federal guidelines. If existing permit limits are more stringent and are being attained, use existing permit limits.

(3) Calculate Appropriate Flows

Appropriate $7Q_{10}$ and annual average flows will be calculated in accordance with the methods found in Techniques for Estimating 7-Day, 10-Year Low-Flow Characteristics for Ungaged Sites on Streams in Mississippi (USGS Report 91-4130), and Low-Flow and Flow-Duration Characteristics of Mississippi Streams (USGS Report 90-4087) or the most recent edition, respectively.

(4) Determine IWC for Chronic, Acute, and Human Health Conditions³

$$IWC = 100 * \frac{Q_w}{Q_r + Q_w}$$

Where: IWC = Instream Wastewater Concentration (where facility water supply is not receiving water.)

Q_r ⁴ = Receiving water flow at appropriate low flow

Q_w = For non-domestic facilities - Maximum 30-day average wastewater flow, if available; Domestic facilities - design flow; Hydrographic control release facilities - appropriate wastewater to stream flow ratio.

³ For calculation of all instream waste concentrations, and instream pollutant concentrations for chronic toxicity and human health screening, instantaneous complete mixing will be assumed unless addressed otherwise in the regulations. IWC is expressed in a percentage throughout these regulations. For acute screening in streams and rivers, complete mixing will be assumed if the IWC is greater than or equal to 10%. If the IWC is less than 10%, the Permit Board may evaluate local acute toxic impacts and require application of mixing zones in accordance with the Mississippi Water Quality Standards.

For oceans, bays, estuaries, and lakes, a Mixing Zone evaluation will be completed to determine the appropriate dilution factors for calculating IWC at the edge of the (regulatory) mixing zone and at the edge of the smaller area of discharged-induced mixing zone (ADIM). In the absence of a site specific evaluation, dilution at the edge of the mixing zone will be assumed to be one part effluent to six parts receiving water body. Mixing zones and associated instream calculations shall be performed as described in EPA's "Technical Support Document for Water Quality-Based Toxics Control" (EPA/505/2-90-001) March 1991, which is referenced in the bibliography (Exhibit F to this chapter).

⁴ Where Q_r = (7 Q_{10} for Acute)
 = (7 Q_{10} for Chronic)
 = (Mean annual flow for Human Health)

If $7Q_{10} = 0$ then $Q_r = 7Q_{10}$ for conditions except for human health and then Q_r equals mean annual flow if available.

- (5) Develop acute, chronic, and human health tables listing parameters, X_w , X_{wa} , X_{ta} , and appropriate criteria.

$$X_t = \frac{(Q_r * X_r) + (Q_w * X_w)}{Q_r + Q_w}$$

Where: IWC = Instream Wastewater Concentration (where facility water supply is not receiving water)

Q_w = maximum 30-day average wastewater flow, if available

Q_r = receiving stream flow

X_r = receiving stream concentration

X_w = historical effluent data

X_{wa} = permit limits from previous permit or from effluent guidelines

X_{ta} = the calculated instream concentration based on existing permit limits or the calculated limit based on current effluent guidelines

X_t = the calculated instream concentration based on historical effluent data from application

If IWC is < one percent, do not develop the chronic table.

If $Q_r = 0$ then $X_t = X_w * IWC/100$

NOTE: To calculate X_{ta} substitute X_{wa} for X_w X_{wa} = Permit Limit

Where: Number of samples is >12 & $7Q_{10}$ is >0 then;

TABLE	X_w ^{5, 6}	Q_r	X_r ⁷
Acute	Maximum Concentration	$7Q_{10}$	Instream Background Concentration
Chronic	Long Term Average Concentration	$7Q_{10}$	Instream Background Concentration
Human Health	Long Term Average Concentration	Mean Annual	Instream Background Concentration

The appropriate criteria to use in each table are as follows:

IWC	Acute	Chronic	Human Health
>1%	Compare X_t and X_{ta} to Acute Water Quality Criterion Value	Compare X_t and X_{ta} to Chronic Water Quality Criterion Value	TSD
≤1%	Same as above	Do Not Compare	Same as above

⁵ from 2C application and/or other appropriate data sources

⁶ if number of samples is <12 then $X_w = (\text{appropriate concentration} * 10)$. The permittee may request utilization of alternative methods for determining reasonable potential set forth in the Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001) or its amendments (TSD), subject to prior Permit Board review and approval of the method's implementation.

⁷ if no instream background concentration exists $X_r = 0$

A parameter fails the screen when the appropriate instream concentration or effluent concentration (as per above) exceeds the appropriate criterion.

MDEQ will use the chronic and acute water quality criteria and/or values as described in State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters. If the permittee's discharge evaluation is based on species not found in Mississippi, the permittee may submit an alternative criterion as per the State's Water Quality Standards. However, said criterion shall conform to EPA's accepted procedures / rationale and is subject to both State and EPA approval.

E. Toxicity Limits.

Chemical specific limits shall be placed in a permittee's permit if any of the parameters evaluated in the toxic screening procedure indicate the reasonable potential for violation of the appropriate criteria (Acute, Chronic, and Human Health). The only exception is when a permittee fails the criteria due only to the application of the variability factor, that is a number of samples less than 12. In the case of the preceding exception, the permittee shall be required to monitor those parameters at a frequency of at least once per month for twelve months with the toxicity screening procedures being reapplied and the permit modified accordingly. The limits for the subject parameters will not be established until the subject data is received.

Toxicity limitations may take two forms; (1) chemical specific numerical limitations placed on the effluent, and/or (2) whole effluent bioassays with whole effluent toxicity (WET) limits. Chemical numerical limits will be calculated by mass balance back to the effluent using the appropriate instream criteria. The Permit Board will consider the utilization of alternative approaches described in EPA's TSD for calculating WQBELs where sufficient supporting documentation is submitted by the applicant. Mixing zones may be utilized in certain circumstances as allowed in the "State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters".

In the absence of WET testing data, WET monitoring will be required upon failure of the acute or chronic chemical specific criteria screening. Failure of WET testing will be a basis for permit WET limitations. Failure will be defined as follows: an acute test that results in an $LC_{50} < 3 * IWC$, or a chronic test that results in an $IC_{25} < IWC$. The IC_{25} refers to the Inhibition Concentration 25, which shall be defined as a point estimate of the effluent concentration that would cause a 25% reduction in a non-lethal biological measurement of the test organisms, such as reproduction or growth.

The establishment of a WET limit versus WET monitoring shall be in accordance with 40 CFR 122.44(d), which is incorporated herein and adopted by reference. If chronic toxicity is indicated, the permit shall limit toxicity by requiring the IC_{25} of the effluent to equal or exceed the IWC. When acute toxicity is indicated, the toxicity limit will take the following form:

$$\text{Effluent 48-hour } LC_{50} > 3 * IWC \text{ (not to exceed 100\%)}$$

TOXICITY SCREENING MATRIX

IWC	Screening Results			Permit Requirements		
	CSS _A	CSS _C	WET ⁸	CS _L	WET _L	WET _M
All	Pass	Pass	Pass	No	No	No
≤1%	Pass	Pass	Fail	No	Yes _A	N/A
	Fail	Pass	Fail	Yes	Yes _A	N/A
	Fail	Pass	Pass	Yes	No	No ⁸
>1%	Fail	Fail	Fail	Yes	Yes _C	N/A
	Fail	Fail	Pass	Yes	No	No ⁸
	Pass	Fail	Fail	Yes	Yes _C	N/A
	Pass	Fail	Pass	Yes	No	No ⁸
	Fail	Pass	Fail	Yes	Yes _C	N/A
	Fail	Pass	Pass	Yes	No	No ⁸

Where:

CSS_A = Chemical Specific Screening Acute

CSS_C = Chemical Specific Screening Chronic

WET = Whole Effluent Toxicity Data

CS_L = Chemical Specific Limits = $WQS/(IWC/100)$

WET_L = Whole Effluent Toxicity Limits W/Monitoring

WET_M = Whole Effluent Toxicity Monitoring Only

Yes_A = Yes/Acute WET Limit = $LC_{50} = 3 * IWC$

Yes_C = Yes/Chronic WET Limit = $IC_{25} = IWC$

N/A = Not Applicable

Y_{AM} = Yes, Acute WET Monitoring Only

Y_{CM} = Yes, Chronic Monitoring Only

Pass = Acute: $LC_{50} \geq 3 * IWC$

= Chronic: $IC_{25} \geq IWC$

Fail = Acute: $LC_{50} < 3 * IWC$

= Chronic $IC_{25} < IWC$

Human health shall be evaluated in accordance with "USEPA, Technical Support Document". When a parameter violates the human health criteria either for "water and organisms" or "organisms only", as appropriate, numerical limitations shall be placed in the permit.

F. Screening Storm Water Discharges

(1) General

⁸Where application form data are reported as "less than" (<) compare the method detection limit (MDL) as defined in Appendix B of 40 CFR 136 which is incorporated herein and adopted by reference. MDLs will be utilized in determining the reasonable potential of a given pollutant to violate water quality criteria. If a pollutant is reported as "non-detectable" above the MDLs as defined in Appendix B of 40 CFR 136, the pollutant will be assumed to be present at that reported level of sensitivity.

- (a) Purpose and Scope. The purpose of this rule is to set forth procedures used to determine individual storm water permit limits for toxics and conventional parameters. Only storm water associated with industrial activity is considered. Process wastewaters are addressed elsewhere in these regulations. The ultimate goal of setting individual storm water permit limits is to reduce pollutants in storm water runoff in order to protect receiving stream water quality.
- (b) Methods of Limits Determination. Due to high variability of storm water volume, only concentration limits will be determined by one or a combination of the procedures which follow:
 - (1) Effluent Limitations Guidelines (ELG);
 - (2) Water Quality Standards (WQS); and
 - (3) Best Professional Judgment (BPJ).
- (c) Wet Weather Flow for Streams with Gaging Stations. For streams with a gaging station, the $7Q_2$ will be used. The value of the $7Q_2$ is readily available in the USGS Water-Resources Investigations Report 90-4087, Low-Flow and Flow-Duration Characteristics of Mississippi Streams, 1991.

Calculation:

$$Q = Site7Q_2 = Gage7Q_2 * \frac{SWA}{GWA}$$

Where:

SWA = Site Watershed Area

GWA = Gage Watershed Area

- (d) Wet Weather Flow for Other Streams and Industrial Sites.
For both small watersheds without gaging data and industrial sites, the stream flow and site runoff will be estimated using the Rational Equation, assuming the average storm event intensity over the entire area. The Rational Equation is:

$$Q = C * I * A$$

Where:

Q = the flow in cfs,

C = the runoff coefficient,

I = the rainfall intensity in inches/hour, and

A = area in acres.

The conversion factor to cfs is slightly less than 1.01 and is generally ignored. Attached to Rule 1.1.2 collectively as Exhibit "C" and incorporated herein by reference is a table of runoff coefficients and a map showing average storm event intensity over Mississippi. The area is estimated using GIS software applications.

Calculation:

$$Q = I * ((C_1 * A_1) + (C_2 * A_2) +)$$

For large watersheds without an applicable gaging station, Best Professional Judgment (BPJ) will be used.

(2) Stormwater Limits Determination

(a) Effluent Limitations Guidelines (ELG)

- (1) The Code of Federal Regulation (CFR), Title 40, provides effluent limitations guidelines that address storm water discharges for the following facilities: Cement Manufacturing (40 CFR Part 411); Concentrated Animal Feeding Operations (CAFO) (40 CFR Part 412); Fertilizer Manufacturing (40 CFR Part 418); Petroleum Refining (40 CFR Part 419); Iron and Steel Manufacturing (40 CFR Part 420); Phosphate Manufacturing (40 CFR Part 422); Steam Electric (40 CFR Part 423); Bleached Papergrade Kraft and Soda Subcategory of the Pulp, Paper and Paperboard (40 CFR Part 430) Meat and Poultry Products (40 CFR Part 432); Coal Mining (40 CFR Part 434); Oil and Gas (40 CFR Part 435); Mineral Mining and Processing (40 CFR Part 436); Centralized Waste Treatment Point Source (40 CFR Part 437); Metal Products and Machinery (40 CFR Part 438); Pharmaceutical Manufacturing (40 CFR Part 439); Ore Mining and Dressing (40 CFR Part 440); Transportation Equipment Cleaning (40 CFR Part 442); Asphalt Emission (40 CFR Part 443); and Concentrated Aquatic Animal Production (40 CFR Part 451). All of the foregoing CFR parts are incorporated herein and adopted by reference.
- (2) When limits are given in the CFR, they are generally concentration values in mg/l. These concentration values will be used for the permit limits if protective of human health, welfare, or the environment.
- (3) When concentration limits are not given in the CFR, Water Quality Standards and/or best professional judgment will be used to determine the facility's discharge limits.

(b) Water Quality Standards (WQS).

In determining limits for an Individual Storm Water Permit, a distinction is made between conventional pollutants and priority toxic pollutants (i.e., metals, organic chemicals, etc.). For oxygen demanding pollutants the Storm Water Section, after making preliminary determinations for wet weather flows, will request a wasteload allocation determination from the Surface Water Division to establish limits for oxygen demanding pollutants. For toxics, including metals and organic chemicals, MDEQ will calculate limits at wet weather flows in two steps as follows:

(1) Determine stream and facility storm water flow rates:

(i) for streams with a gaging station, determine the site $7Q_2$ stream flow by use of the following equation:

$$Q = Site7Q_2 = Gage7Q_2 * \frac{SWA}{GWA}$$

Where:

SWA = Site Watershed Area

GWA = Gage Watershed Area

(ii) for small watersheds without a gaging station, measure the watershed area using GIS computer software applications. An appropriate runoff coefficient, C, for the entire watershed region is used. The average storm event intensity, I, is used. The stream flow rate is calculated as follows:

$$Q_{ws} = C * I * A_{ws}$$

Where:

Q_{ws} = flow from the watershed in cfs

A_{ws} = Area in acres

I = average storm event intensity in inches per hour

C = appropriate runoff coefficient

WS = watershed

(iii) Storm water flow rate from the industrial site can be estimated by using the procedure set forth in (ii) above. The drainage areas (pervious and impervious) are reported in the application.

$$Q_{Industry} = I * ((C_1 * A_1) + (C_2 * A_2) +)$$

- (2) Calculate Permit Limits. Using the flows determined under Rule 1.2.6.F.2.b and the Mississippi, or EPA (when there is no State criteria) Water Quality Criteria for Toxic Pollutants, calculate maximum allowable concentrations in the storm water runoff for all parameters of concern. Since the acute water quality criteria are based on 96 hours exposure and the EPA storm water sampling protocol requires first 30 minutes of grab and 3 hours of composite samples during a storm after 72 hours of dry weather, only the acute criterion will be used to establish permit limits. Also, the average storm event duration in Mississippi is about 8 hours.

Calculation:

$$PL = CMC * \frac{Q_I + Q_S}{Q_I}$$

Where:

PL = Permit Limit
CMC = Criteria Maximum Concentration (Acute)
 Q_I = Flow from industry
 Q_S = Flow from stream

When the model or calculated limit is higher than the maximum concentration reported on the 2F application, the permit will generally only require monitoring.

(c) Best Professional Judgment

When there are no ELG or *WQS* numeric limitations or standards, BPJ will be used to set permit limits or to require Best Management Practices (BMPs) to protect water quality.

G. Determining Compliance with Non-Detect or Below Detection Limitations.

It is recognized that the calculated limits for specific chemicals may be below the analytical minimum quantitation level for the pollutant of concern. However, in this case the permit limit will be this calculated value. In such cases, compliance with the permit limits shall be determined as follows:

- (1) The permit will specify the analytical procedure to be used.
- (2) The guidelines establishing test procedures for the analysis of pollutants set forth in 40 CFR Part 136 are incorporated herein and adopted by reference and as hereinafter amended. The weblink to 40 CFR Part 136 follows:

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title40/40cfr136_main_02.tpl

- (3) The MQL is the lowest concentration at which a particular substance can be quantitatively measured, and is defined analytically as the lowest concentration used in the calibration of the measurement system.
- (4) Any sample result reported as "non-detected" or "less than" the MQL shall be entered as zero.

The following language shall be placed in permits:

If the results for a given sample analysis are such that any parameter (Other than fecal coliform, enterococci, e coli) is not detected at or above the minimum level for the test method used, a value of zero will be used for that sample in calculating an arithmetic mean value for the parameter. If the resulting calculated arithmetic mean value for that reporting period is zero, the permittee shall report "NODI=B" on the DMR. For fecal coliform and other pollutants that are based on calculating a geometric mean, 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.

Permits will specify the appropriate analytical method, based on the appropriate sensitivity. Permittees must then report results based on data containing acceptable calibration points at least as low as the MQL.

H. Bioassay Language/Monitoring.

Exhibit "D", which is attached hereto and incorporated herein by reference, represents the standard bioassay language placed in NPDES permits for chronic and acute bioassays, respectively. The fundamentals of the bioassay monitoring requirements are as follows:

- (1) Duration

Biomonitoring is for the life of the NPDES permit. Assuming compliance with the toxic limits, monitoring is at a frequency of once per quarter for the first twelve months for industrial and municipal permittees and semi-annually thereafter. The sampling frequency during compliance monitoring shall be at least twice per year unless specified otherwise elsewhere in these regulations, and sampling shall be timed to include the seasonal extremes of the year (hot-dry and cold-wet).

- (2) Species

At least two species (one vertebrate and one invertebrate) must be used.

(3) Procedures

Permittee must use the most current EPA accepted procedures. Procedural references are specified in the bioassay language.

(4) Non-Compliance

A permitted facility shall be considered in non-compliance when it fails any bioassay subject to a WET limit. Once a permittee fails a WET test, the permittee shall conduct a second WET test. For chronic tests, the second Chronic WET test must be completed within 30 days following completion of the failed test. For acute tests, the second WET test must be completed within two weeks of the completion of the failed test. Results must be submitted to the Department within two weeks of test completion. If the permittee fails the second WET test, then the permittee shall submit a preliminary Toxicity Reduction Evaluation Plan (TREP) within 45 days, following completion of the follow-up test, the first step of which shall be increased monitoring to determine the characteristics of the toxicity. If the permittee passes the second WET test, the permittee shall conduct the next WET test at the regularly scheduled frequency in the permit. Repeated failure of the WET tests may result in the Permit Board increasing the frequency of WET testing. The Commission will determine the appropriate enforcement response in accordance with existing enforcement policy.

(5) Quality Assurance/Quality Control

A permittee must submit with each WET test result a completed OPC NPDES Whole Effluent Toxicity Testing Report form prescribed by the Commission (included in Exhibit "D").

I. Attaining Compliance with WQBELS.

Whenever a new WQBEL is imposed in a permit, the permittee shall have no more than three years in which to achieve compliance with such limitations. A permittee may apply to the Permit Board for a variance from the compliance schedule.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.2.7 Bibliography.

Exhibit "F" is attached hereto for reference only as a bibliography. The documents contained in the bibliography are not incorporated by reference. The Department may utilize any document duly promulgated through the Federal Administrative Procedures Act and any other document which contains scientifically defensible procedures.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

EXHIBIT A to Chapter 1, Subchapters 1 and 2 - EMPIRICAL WATER BODY MODEL ASSUMPTIONS FOR CONVENTIONAL POLLUTANTS AND CONVENTIONAL WATER QUALITY MODELS

I. EMPIRICAL STREAM, LAKE, and ESTUARY MODEL ASSUMPTIONS FOR CONVENTIONAL POLLUTANTS

A. 7Q₁₀ Flow Values

1. The 7Q₁₀ flow in unregulated, natural streams is to be determined from Low-flow and Flow-Duration Characteristics of Mississippi Streams, U.S.G.S., Report 90-4087 (hereinafter "Report 90-4087") or the most recent update of this publication.
2. 7Q₁₀ value of a gage will be used directly if gaging station is at or near the point of discharge.
3. 7Q₁₀ flow coefficients (7Q₁₀ value in CFS/drainage area in square miles) of a gaging station will be used to calculate a 7Q₁₀ value for a point discharge if there is a gaging station on the stream or on a nearby stream. An average 7Q₁₀ flow coefficient may be used if there is more than one nearby gaging station.
4. 7Q₁₀ flow coefficients can be taken from Report 90-4087 if no gaging station is available. The value will be assumed to be in the middle of the given range.
5. A 7Q₁₀ flow coefficient of 0.0 cfs will be used for intermittent streams or when the Report 90-4087 lists the 7Q₁₀ flow coefficient as less than 0.01 cfs per square mile.
6. The annual 7Q₁₀ flow will be used for seasonal winter allocations, unless data is available to determine seasonal or monthly 7Q₁₀ flows.
7. Semi-annual, quarterly or monthly 7Q₁₀ flows with their respective average maximum temperatures may be used to determine various seasonal wasteload allocations.
8. In regulated streams the legally guaranteed minimum flow will be used for allocations unless otherwise provided in these regulations.
9. Spatially distributed flow will be included to account for flow gained at 7Q₁₀ from sources other than major tributaries.
10. Spatial flow will be calculated between gaging stations if available.
11. Spatial flows will be determined by using 7Q₁₀ flow coefficients where sufficient gaging stations are not available.

12. Spatial flow will be included at equal increments over the length of a given stream segment.

B. 7Q₂ Flow Values

The 7Q₂ flow in unregulated, natural streams will be used in conjunction with the other assumptions contained herein for establishing permit limitations for storm water permits. The 7Q₂ flow will be determined from Low-Flow and Flow-Duration Characteristics of Mississippi Streams, U.S.G.S., Report 90-4087 or the most recent update of this publication. In cases in which either (1) the data is indefinite or inconclusive, or (2) the 7-day, 2-year minimum flow and/or the 7-day, 10-year minimum flow are inappropriate because of the hydrology of the area, other appropriate State and federal agencies will be consulted in establishing the applicable stream flow.

C. Temperature

The criteria for temperature selection are as follows:

1. For streams for which sufficient temperature data is available, the design temperature will be the average daily maximum temperature for the months of July and August.
2. For streams with insufficient or no temperature data, the following will be assumed:

Stream Size	Annual	Summer (May-Oct)	Winter (Nov-April)
Streams with minimum low flows ≥ 300 cfs	30°C	30°C	20°C
Streams with minimum low flows ≥ 50 cfs and < 300 cfs	28°C	28°C	20°C
Streams with minimum low flows < 50 cfs	26°C	26°C	20°C

D. Velocity

Time-of-travel measurements will be used when available. Average reach velocity can be determined by completion of a dye tracer study. A minimum velocity of 0.1 fps will be used.

Estimation Procedures:

$$V = 0.127 * Q_{Act}^{0.69} * \frac{S^{0.1}}{Q_{Avg}^{0.24}}$$

where:

V = velocity in fps

Q_{Act} = 7Q₁₀ + discharge flow in cfs

S = stream slope in ft./mile

Q_{Avg} = the average stream flow in cfs

$$V = (0.144 * Q_{Act}^{0.4} * S^{0.2}) - 0.19$$

E. Depth

Depth will be used if accurate stream depth profiles are available as determined by measurement or available flood plain maps. For larger, slow-moving rivers, depths may also be estimated. In the WASP models, minimum depth will be one-half of the estimated or measured depth.

F. Slope

1. Stream slope determinations will be made from GIS computer software, NHD Plus values, USGS quad maps, or flood plain reports.
2. Stream slope profiles will be analyzed (elevation vs. mile) to determine if the slope changes along the stream length being modeled.
3. Model stream segments will correspond to noticeable stream slope changes.

G. Kd (Carbonaceous Deoxygenation Rate)

1. When usable field data are not available, the stream's Kd rate will be based on both the type of wastewater, type of treatment and/or the instream CBOD_u concentration.
2. The temperature correction equation is:

$$Kd(T) = Kd(20^{\circ}C) * 1.047^{T-20}$$

3. When instream CBOD_u values approach background conditions the Kd rate will be set to 0.15/day and the ratio of Ka/Kd = 2 or Ka = 0.3/day.
4. When actual data are available, the Kd rate will be determined according to the procedures outlined in Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (Second Edition), EPA/600/3-85/040 or most current version.
5. Kd is assumed equal to Kr (overall rate of CBOD_u removal from the water column) in most model applications.
6. Normally, a laboratory-derived “bottled” CBOD_u decay rate taken from the effluent only (Kl) will not be used in modeling. Typically, an instream decay rate will be used for modeling purposes.
7. Kd = 0.3/day (base e) at 20°C will be used for streams receiving upgraded lagoon effluent (single or multi-cell lagoons upgraded with sand filters, artificial wetlands, etc.).
8. The following clarification can be used in the estimation procedure for Kd, CBOD_u rate.

Type of Treatment	Instream CBOD _u (mg/l)	Instream CBOD ₅ * (mg/l)	Kd (base e @ 20°C) (day ⁻¹)
Lagoon (CBOD ₅ =30)	> 15	>10	0.6
Lagoon (CBOD ₅ =30)	≤ 15 and > 7	≤ 10 and > 4.7	0.4
Lagoon (CBOD ₅ =30)	≤ 7	≤ 4.7	0.3
Mechanical (CBOD ₅ ≤30)	> 7	> 4.7	0.4
Mechanical (CBOD ₅ >10)	≤ 7	≤ 4.7	0.3
Mechanical (CBOD ₅ ≤10)	-	-	0.3

Note these values are estimates. If actual data are available, they should be used.

H. Kn (Nitrogenous Deoxygenation Rate)

1. Kn has been found to range from 0.3 to 1.5 per day (at 20°C) in free-flowing streams containing greater than 2 to 3 mg/l of dissolved oxygen. Impounded streams or streams with low DO levels will exhibit Kn's as low as 0.0 to 0.3 per day.

2. In the absence of measured values, Kn (base e @ 20°C) will be assumed as 0.3 per day for streams with slope less than or equal to 20 ft./mile and 0.5 per day for streams with slope greater than 20 ft./mile. When actual data are available, the Kn rate will be determined according to the procedures outlined in EPA/600/3-85/040.

I. Ka (Reaeration Rate)

1. For small streams in Mississippi the most appropriate formula for calculating the reaeration coefficient is the one developed by E. C. Tsivoglou.

$$Ka = C * S * V$$

Where:

Ka = reaeration rate, 1/day
C = escape coefficient, 1/ft.
S = slope, ft./mile
V = velocity, mile/day

2. Assume escape coefficients recommended for Mississippi.

(a) C = 0.11 for stream flow less than 10 cfs

(b) C = 0.0597 for greater than or equal to 10 cfs to a stream flow less than 280 cfs

3. O'Conner-Dobbins equation may be used for streams with depths greater than 5 feet and where there are adequate stream depth profiles or reasonable estimates available. If stream flow is less than 280 cfs, Tsivoglou escape coefficient values should be considered.

$$K_a = \frac{12.9 * V^{0.5}}{D^{1.5}}$$

where:

V = velocity in ft./sec.

D = depth in ft.

Ka = reaeration rate 1/day (base e @ 20°C).

4. A minimum Ka value of 0.15/day will be used except in the case mentioned under Kd where Ka/Kd is not less than 2.

5. In the WASP model COVAR may be considered.

J. Stream Background Conditions

Assume the following stream background conditions unless data show otherwise.

1. DO = 85% of saturation at assumed stream temperature (table attached)
2. CBOD_U = 2.0 mg/l
3. CBOD₅ = 1.33 mg/l
4. NBOD_U = 0.5 mg/l
5. NH₃-N = 0.10 mg/l

K. Photosynthesis / Respiration

1. Input values for P and R (mg/l/day) can be determined in stream studies using the:
 - (a) Delta Method
 - (b) Diurnal Curve Method
 - (c) Light/Dark Bottle Method
2. In the absence of field data, P and R will be assumed to be 0.0 mg/l/day. This assumption will be reevaluated for streams dominated by algae.

L. Sediment Oxygen Demand

1. In the STREAM Model, sediment oxygen demand ("SOD") (mg/l/day) will be assumed to be 0.0. In WASP and other dynamic models, SOD rates may be used to calibrate the model. All values used for SOD rates will be within normal ranges found in the ecoregion being modeled.
2. Where SOD rates have been determined or sludge blankets are known to exist, SOD will be incorporated in models.
3. SOD rates in g/m²/day will be converted to mg/l/day according to the following equation:

$$SOD = \frac{B(1000mg / g)}{H(0.3048meters / ft.) * (1000liters / meter^3)}$$

where:

- S = SOD rate in mg/l/day @ 20°C
 B = SOD rate in g/m²/day @ 20°C
 H = average reach depth in feet

M. Wastewater Inputs

1. The Department's water quality model, STREAM uses first order kinetics to characterize ultimate CBOD decay. Once effluent limits are set using this model, CBOD₅ will be determined for inclusion in the permit.
2. The following ultimate CBOD to CBOD₅ ratios will be used when actual data are not available.

Wastewater	Ratio
Sanitary (mechanical secondary)	1.5
Sanitary (advanced)	2.3
Food Processing	3.0
Meat/Poultry Processing	2.5
Pulp/Paper	5.0
Tannery	3.0
Textile	3.0

3. Industries will be encouraged to provide actual ultimate CBOD_U and NBOD_U values for the wastewater under evaluation. The method of choice for determining these values will be the method outlined by NCASI in Ultimate Oxygen Demand (Biochemical), NE87-03.
4. The model uses first order kinetics to characterize oxidizable nitrogen or NBOD_U decay. Wastewater inputs/outputs are NH₃-N (as nitrogen). The value is converted to oxygen demand using the factor 4.57.

N. Disinfection

1. Bacteria allocations for effluents will be assigned so as to meet the State's water quality standards for the designated use of the receiving water. A background coliform concentration of 200#/100 ml will be assumed in fresh water at the low-flow condition, unless site-specific data taken from an upstream site, approved by the Department, during a low-flow event indicates that another background level should be used.
2. Marine waters (recreational salt-waters) will have a background concentration of 35 colonies/100 ml at the low-flow condition, unless site-specific data taken from the water body, approved by the Department, during a low-flow event indicates that another background level should be used.
3. Allocations will be derived according to the following dilution mix equation:

$$C_E = \frac{(C_T * Q_T) - (C_H * Q_H)}{Q_E}$$

where:

- C_E = allowable effluent bacteria concentration in colonies /100ml
- Q_E = daily average effluent flow in cfs
- C_H = headwater bacteria concentration of 200 colonies /100ml
- Q_H = headwater flow ($7Q_{10}$) in cfs
- C_T = bacteria standard after mixing (usually 200 colonies /100ml May through October or 2000 col/100ml November through April)
- Q_T = total stream flow after mixing in cfs

4. Disinfection may be required for hydrograph controlled release (HCR) lagoons.

O. Chlorine Toxicity

Residual chlorine allocations for all municipal and industrial effluents will be developed so as to meet the State's water quality criteria. To properly select the final in-stream target concentration, the type of receiving water (fresh or estuarine) and the IWC* (instream waste concentration) must be known. Once this information is known, allocations will be determined using the following dilution mix equation:

$$C_E = \frac{(C_T * Q_T) - (C_H * Q_H)}{Q_E}$$

where:

- C_E = allowable effluent chlorine concentration in ug/l
- Q_E = daily average effluent flow in cfs
- C_H = headwater chlorine concentration (usually 0.0 ug/l)
- Q_H = headwater flow ($7Q_{10}$) in cfs
- C_T = chlorine standard in ug/l (after mixing)

	Acute	Chronic
Fresh	19	11
Estuarine	13	7.5

Q_T = total stream flow in cfs (after mixing)

P. Instream Waste Concentration

The instream waste concentration (IWC) is the resulting percentage of effluent after complete mixing with the receiving water body at the headwater flow appropriate to the allocation procedure, normally the $7Q_{10}$. Acute or chronic pollutant target criteria are selected based on the resulting IWC.

$$IWC = \frac{Q_E}{Q_T} * 100$$

For $IWC < 1\%$ use acute criteria; For $IWC > 1\%$ use chronic criteria.

Q. Ammonia Toxicity

Ammonia must not only be considered due to its effect on dissolved oxygen in a receiving water, but also its toxicity potential. It is recognized that effluent ammonia concentrations may be more restricted due to toxicity than due to oxidation. Consequently, the modeler of conventional pollutants must consider ammonia toxicity.

Ammonia as nitrogen (NH_3-N) allocations for effluents will be developed to meet the water quality criteria given in Quality Criteria for Water, 1986, EPA 440/5-86-001. Generally, ammonia limits will be placed in permits of municipal facilities utilizing lagoon type treatment. To properly select the final in-stream target concentration, the IWC (instream waste concentration) must be known and the warm water target values used. Stream temperature and pH after mixing must also be known or assumed. For empirical modeling a pH of 7.0 and a stream temperature of $25^{\circ}C$ are assumed limitations. Once this information is known, allocations will be determined using the following dilution mix equation:

$$C_E = \frac{(C_T * Q_T) - (C_H * Q_H)}{Q_E}$$

where:

- C_E = allowable effluent NH_3 concentration in mg/l
- Q_E = daily average effluent flow in cfs
- C_H = headwater ammonia concentration of 0.1 mg/l
- Q_H = headwater flow ($7Q_{10}$) in cfs
- C_T = ammonia criteria in mg/l (after mixing)
- Q_T = total stream flow in cfs (after mixing)

Final ammonia allocations will be reported as ammonia nitrogen.

$$\text{NH}_3\text{-N} = \text{NH}_3 \times 0.822$$

II. CONVENTIONAL WATER QUALITY MODELS

The Department's freshwater quality model is a steady-state modified Streeter-Phelps dissolved oxygen sag model. The model includes the stream's carbonaceous and nitrogenous BOD ultimate demand, the stream's reaeration rate, the net photosynthetic demand and production, and the benthic oxygen demand. The model was developed in 1973 by the staff of the Civil Engineering Department at Mississippi State University. The STREAM model was updated by MSU in 2004 to work in a java and oracle computer environment. The model is used for both empirical and calibration purposes.

For salt water modeling, nutrient modeling, and highly complex hydrology, the Department will use a combination of the Environmental Fluids Dynamic Code EFDC model for the hydrology and the WASP model. Both of these models are supported by EPA and are accessible in the public domain.

The Department may utilize other models and/or documents which are approved by both the Department and EPA, are scientifically defensible and/or have been duly promulgated through the Federal Administrative Procedure Act.

EXHIBIT B to Chapter 1, Subchapters 1 and 2
DISINFECTION REQUIREMENTS FOR SANITARY SEWAGE

I. DISCHARGE TO WATERS CLASSIFIED PUBLIC WATER SUPPLY.

Disinfection shall be required regardless of the quantity of receiving water for discharges to or within close proximity, both in distance and travel time, to public water supply waters.

II. DISCHARGES TO WATERS CLASSIFIED RECREATION AND TO WATERS OF OTHER CLASSIFICATIONS WITH KNOWN RECREATIONAL SITES.

Disinfection shall be required regardless of the quantity of receiving water.

III. DISCHARGES TO WATERS CLASSIFIED SHELLFISH HARVESTING.

1. Disinfection shall be required for discharges to or within one tidal cycle of approved or conditionally approved shellfish harvesting areas.

2. Disinfection shall be required for discharges within close proximity to closed shellfish harvesting areas, if, after mixing at the most unfavorable hydrographic and pollutional conditions, the geometric mean concentration of fecal coliform is expected to exceed 14 colonies per 100 ml.

IV. DISCHARGES TO WATERS CLASSIFIED FISH AND WILDLIFE.

1. Disinfection shall be required for discharges to or within close proximity, both in distance and/or travel time, to waters with known recreational sites regardless of the quantity of receiving water.

2. Disinfection shall be required for discharges to or within close proximity to public water supply waters, if, after mixing at the most unfavorable hydrographic and pollutional conditions (normally the 7Q₁₀ low flow), the geometric mean concentration of fecal coliform is expected to exceed 200 colonies per 100 ml.

3. Disinfection shall be required for discharges to or within close proximity to fish and wildlife waters, if, after mixing at the most unfavorable hydrographic and pollutional conditions (normally the 7Q₁₀ low flow), the geometric mean concentration of fecal coliform is expected to exceed 200 colonies per 100 ml during May through October and 2000 colonies per 100 ml from November through April.

V. DISCHARGES TO WATERS CLASSIFIED EPHEMERAL.

Disinfection shall be required where the probability of a public health hazard or other circumstances so warrant.

VI. CONSISTENCY WITH WATER QUALITY STANDARDS

Notwithstanding the above, disinfection requirements for sanitary sewage shall be protective of water quality standards.

EXHIBIT C to Chapter 1, Subchapters 1 and 2
VALUES OF RUNOFF COEFFICIENT C

TYPE OF DRAINAGE AREA RUNOFF COEFFICIENT, C

LAWNS:

SANDY SOIL, FLAT 2%	0.05-0.10
SANDY SOIL, AVERAGE, 2-7%	0.10-0.15
SANDY SOIL, STEEP, 7%	0.15-0.20
HEAVY SOIL, FLAT, 2%	0.13-0.17
HEAVY SOIL, AVERAGE, 2-7%	0.18-0.22
HEAVY SOIL, STEEP, 7%	0.25-0.35

BUSINESS:

DOWNTOWN AREAS	0.70-0.95
NEIGHBORHOOD AREAS	0.50-0.70

RESIDENTIAL:

SINGLE FAMILY AREAS	0.30-0.50
MULTI UNITS, DETACHED	0.40-0.60
MULTI UNITS, ATTACHED	0.60-0.75
SUBURBAN	0.25-0.40
APARTMENT DWELLING AREAS	0.50-0.70

INDUSTRIAL:

LIGHT AREAS	0.50-0.80
HEAVY AREAS	0.60-0.90

PARKS, CEMETERIES	0.10-0.25
PLAYGROUNDS	0.20-0.35
RAILROAD YARD AREAS	0.20-0.40
UNIMPROVED AREAS	0.10-0.30

STREETS:

ASPHALTIC	0.70-0.95
CONCRETE	0.80-0.95
BRICK	0.70-0.85
DRIVES AND WALKS	0.75-0.85
ROOFS	0.75-0.95

SOURCE: CHOW, V.T. 1964 Handbook of Applied Hydrology, McGraw Hill, Inc., New York, N.Y.

Calculation of Average Flow Rate:

$$AFR = \frac{[(A_1 * C_1 * R_1) + (A_2 * C_2 * R_2) + (A_3 * C_3 * R_3) \dots]}{T_o}$$

Where:

AFR = Average Flow Rate in cu. ft./min

A = Area in acres

C = Runoff Coefficient

R_x = Runoff for area

T_O = Total Runoff

EXHIBIT D to Chapter 1, Subchapters 1 and 2 - BIOASSAY REQUIREMENTS

I. Chronic Bioassay Requirements

The Water Quality Standards of Mississippi require that waters shall be free from substances attributable to municipal, industrial, agricultural, or other discharges in concentrations or combinations that are toxic or harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate, and Coastal Waters, Section II.4., Minimum Conditions Applicable to All Waters (current edition). In accordance with such requirements, an NPDES permit holder is authorized to discharge from outfall(s) only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh water Organisms, (EPA/600/4-89/001) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or the most recent edition.

(a) Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (EPA/600/4-89/001) or most recent edition⁹. For estuarine testing, dilution water shall consist of synthetic seawater or hyper-saline brine combined to achieve a salinity of 20 parts per thousand according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/600/4-87/028) or most recent edition. These dilution waters will be deemed acceptable if the control organisms in the toxicity tests meet the minimum EPA criteria for chronic tests.

(b) If the Mississippi Office of Pollution Control determines the receiving waters are freshwater, the permittee shall conduct a *Ceriodaphnia dubia* Survival and Reproduction Test, and a *Pimephales promelas* Larval Survival and Growth Test on serial dilutions of effluent to determine if the discharge from outfall(s) is chronically toxic. Such testing will determine if the water affects the survival, growth, and reproduction of the test organisms. Static renewal tests will be conducted on three 24- hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for

⁹ Contact MDEQ Office of Pollution Control Laboratory for information on most recent editions(s) of methods manual

Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-89/001), or the most recent edition, are met. All data shall be statistically analyzed according to the referenced manual.

(c) If the Mississippi Office of Pollution Control determines that the receiving water is estuarine, the permittee shall conduct a *Menidia beryllina* Larval Survival and Growth Test and a *Americamysis* Survival, Growth, and Fecundity Test on serial dilutions of effluent to determine if the discharge from outfall(s) is chronically toxic. Such testing will determine if the water affects the survival, growth, and fecundity of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or most recent edition are met. All test data shall be statistically analyzed according to the referenced manual.

(d) A standard reference toxicant quality assurance test (chronic) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts monthly QA/QC reference toxicant tests with both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests results. In either case, the reference toxicant test results must be submitted with the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

3. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted once per quarter for a period of one year following the effective date of the permit. After the first year of monitoring, provided the IC₂₅ is greater than or equal to the IWC% the frequency of monitoring will be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).

4. If any one chronic toxicity test indicates the IC₂₅ is less than the IWC%, the provisions in Section 6 below shall apply, and the permittee shall conduct another chronic toxicity test(s) with the organism(s) that failed. This follow-up test must be completed within 30 days following completion of the failed test. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. The permittee must also submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

5. In the event the permittee passes the additional WET test, the permittee shall resume testing in accordance with the testing schedule set forth in the permit. In the event the permittee fails the second WET test, the permittee shall submit a Toxicity Reduction Evaluation Plan (TREP) within 45 days following completion of the follow-up test in order to reduce the toxicity

of the effluent to safe ¹⁰ levels¹¹. The first phase of the TREP will include increased monitoring to characterize the toxicity of the effluent.

6. If the IC₂₅ of any test is less than the IWC%, then the effluent will be considered unacceptably chronically toxic, and this will constitute a violation of Part I of this permit.

7. In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

II. ACUTE BIOASSAY REQUIREMENTS

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate, Interstate and Coastal Waters (current edition). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform static renewal (tests that exceed 48 hours shall be renewed), definitive (a control and five effluent concentrations) toxicity tests at 25°C in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or the most recent edition. Acute toxicity tests will be conducted on 24-hour composite samples of effluent, and tests must be initiated within 36-hours of completion of the sampling period.

(a) If the Mississippi Office of Pollution Control determines the receiving stream is freshwater, the permittee must use both the following test organisms and test durations:

- (1) *Pimephales promelas* (< 24-hrs.of age) - 96 hour
- (2) *Ceriodaphnia dubia* - 48 hour

(b) If the Mississippi Office of Pollution Control determines the receiving stream is marine or estuarine, the permittee must use both the following test organisms and test durations:

- (1) *Menidia beryllina* - 96 hour
- (2) *Americamysis* - 48 hour

(c) Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Methods for Measuring the

¹⁰Safe levels will be determined by Title 11, Part 6, Chapter 2.

¹¹In large rivers, lakes, and estuaries the permittee must provide a schematic map showing isopleths of waste concentrations.

Acute Toxicity of Effluents and Receiving Waters to Fresh water and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. For estuarine testing, dilution water shall consist of synthetic seawater or hyper-saline brine combined to achieve a salinity of 20 parts per thousand according to Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. These dilution waters will be deemed acceptable if the survival of the control organisms in the toxicity tests is 90% or greater.

(d) A standard reference toxicant quality assurance test (acute) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts monthly QA/QC reference toxicant tests for both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests. In either case the reference toxicant test results must be submitted in the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

3. The permittee shall conduct the first series of tests specified in Section 2 above within 90 days of the commencement of the discharge. The tests shall be conducted quarterly thereafter for twelve (12) consecutive months, provided that the acute LC_{50} is greater than or equal to the product of 3 times the IWC%. After the first year of testing, the frequency of monitoring will be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot- dry and cold-wet). The results of these acute toxicity tests shall be reported to the Mississippi Environmental Quality Permit Board on the next quarterly discharge monitoring report. Final acute toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Fresh water and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. Along with this report, the permittee must submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form within two weeks following test completion.

4. If either toxicity test results in an LC_{50} value of less than the product of 3 times the IWC%, the permittee shall initiate a second toxicity test within 2 weeks after the completion of the first toxicity test using the organism(s) that failed. The LC_{50} determinations from these tests shall be reported to the Mississippi Environmental Quality Permit Board within two weeks after completion of the test.

(a) In the event that the results of any toxicity test reveals that the LC_{50} of the permittee's effluent is less than the product of 3 times the IWC%, then this finding will constitute a violation of Part I of this permit. In the event the permittee passes the second toxicity test, the permittee shall resume testing in accordance with the testing schedule set forth in the permit. In the event the permittee fails the second WET test, the permittee shall submit a Toxicity Reduction Evaluation Plan (TREP) within 45 days following completion of the follow-up tests to reduce the toxicity of the effluent to safe levels¹². The first phase of the TREP shall include monitoring to characterize the toxicity of the effluent.

(b) In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

¹² Safe levels will be determined by WPC-2.

III. ACUTE WHOLE EFFLUENT TOXICITY MONITORING REQUIREMENTS

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate, Interstate and Coastal Waters (current edition). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform static, non-renewal, definitive (a control and five effluent concentrations) toxicity tests at 25°C in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or the most recent edition. Acute toxicity tests will be conducted on 24-hour composite samples of effluent, and tests must be initiated within 36-hours of completion of the sampling period.

(a) If the Mississippi Office of Pollution Control determines the receiving stream is freshwater, the permittee must use both the following test organisms and test durations:

- (1) *Pimephales promelas* (< 24-hrs.of age) - 96 hour
- (2) *Ceriodaphnia dubia* - 48 hour

(b) If the Mississippi Office of Pollution Control determines the receiving stream is marine or estuarine, the permittee must use both the following test organisms and test durations:

- (1) *Menidia beryllina* - 96 hour
- (2) *Americamysis* - 48 hour

(c) Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For freshwater tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Fresh water and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. For estuarine testing, dilution water shall consist of synthetic seawater or hyper-saline brine combined to achieve a salinity of 20 parts per thousand according to Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. These dilution waters will be deemed acceptable if the survival of the control organisms in the toxicity tests is 90% or greater.

(d) A standard reference toxicant quality assurance test (acute) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts monthly QA/QC reference toxicant tests for both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests. In either case the

reference toxicant test results must be submitted in the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form.

3. The permittee shall conduct the first series of tests specified in part 1 above within 90 days of the issuance of the permit. The tests shall be conducted quarterly thereafter for twelve (12) consecutive months. After the first year of testing, the frequency of monitoring will be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot- dry and cold-wet). The results of these acute toxicity tests shall be reported to the Mississippi Environmental Quality Permit Board on the next quarterly discharge monitoring report. Final acute toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition. Along with this report, the permittee must submit a completed Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form within two weeks following test completion.

4. In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

IV. CHRONIC WHOLE EFFLUENT TOXICITY MONITORING REQUIREMENTS

The Water Quality Standards of Mississippi require that all waters be free from substances in concentrations or combinations which are harmful to humans, animals, or aquatic life (State of Mississippi, Water Quality Criteria for Intrastate and Coastal Waters, Section II.4, Minimum Conditions Applicable to All Waters (current edition). In accordance with such requirements, the permittee is authorized to discharge from outfall(s) only in accordance with the following conditions:

1. The permittee shall submit any existing toxicity data for review by the Mississippi Office of Pollution Control within 30 days of the effective date of this permit.

2. The permittee shall perform 7-day chronic, static renewal, definitive (a control and five effluent concentrations) WET tests in accordance with Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-89/001) or Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or the most recent edition.

(a) Dilution water used for these tests shall consist of reagent grade water, defined as distilled or deionized water that does not contain substances which are toxic to the test organisms. For fresh water tests, dilution water shall consist of reagent grade chemicals or mineral water combined to make moderately hard dilution water according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Fresh water Organisms (EPA/600/4-89/001) or most recent edition. For estuarine testing, dilution water shall consist of synthetic seawater or hyper-saline brine combined to achieve a salinity of 20 parts per thousand according to Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms (EPA/600/4-87/028) or most recent

edition. These dilution waters will be deemed acceptable if the control organisms in the toxicity tests meet the minimum EPA criteria for chronic tests.

(b) If the Mississippi Office of Pollution Control determines the receiving waters are fresh water, the permittee shall conduct a *Ceriodaphnia dubia* Survival and Reproduction Test, and a *Pimephales promelas* Larval Survival and Growth Test on serial dilutions of effluent to determine if the discharge from outfall(s) is chronically toxic. Such testing will determine if the water affects the survival, growth, and reproduction of the test organisms. Static renewal tests will be conducted on three 24- hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, (EPA/600/4-89/001), or the most recent edition, are met. All data shall be statistically analyzed according to the referenced manual.

(c) If the Mississippi Office of Pollution Control determines that the receiving water is estuarine, the permittee shall conduct a *Menidia beryllina* Larval Survival and Growth Test and a *Americamysis* Survival, Growth, and Fecundity Test on serial dilutions of effluent to determine if the discharge from outfall(s) is chronically toxic. Such testing will determine if the water affects the survival, growth, and fecundity of the test organisms. Static renewal tests will be conducted on three 24-hour composite samples of effluent. The first of these composite samples will be used to set up the tests and for the day 1 and day 2 renewals, the second of these composite samples will be used to renew the tests on days 3 and 4, and the third composite sample will be used to renew the tests on days 5 and 6. Not more than 36 hours will elapse between sampling and the first use of any of the composite samples. The chronic test(s) shall be considered valid only if the acceptability criteria referenced in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, (EPA/600/4-87/028) or most recent edition are met. All test data shall be statistically analyzed according to the referenced manual.

(d) A standard reference toxicant quality assurance test (chronic) shall be conducted concurrently with the effluent tests using both species used in the toxicity tests. Alternatively, if a lab conducts monthly QA/QC reference toxicant tests with both species as part of their SOP, these results may be submitted in lieu of the above mentioned concurrent tests results. In either case, the reference toxicant test results must be submitted with the final report as well as on the Mississippi Office of Pollution Control NPDES Whole Effluent Toxicity Testing Report Form within two weeks of test completion. Final chronic toxicity test results shall be in report form as outlined in Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition, (EPA-600/4-90/027) or most recent edition.

4. These chronic toxicity tests shall be initiated within 90 days of the date of issuance of the permit to evaluate wastewater toxicity. Such chronic toxicity tests shall be conducted once per quarter for a period of one year following the effective date of the permit. After the first year of

testing, the frequency of monitoring may be reduced to once per six months for the life of the permit. Sampling shall be timed to cover the seasonal extremes of the year (hot-dry and cold-wet).

5. In addition to the specific conditions of this permit, the permittee shall comply with all applicable conditions of 40 CFR 122.7 and 40 CFR 122.61 (06-03-93).

NPDES Whole Effluent Toxicity Testing Report Form

Mississippi Office of Pollution Control

* All blanks on this form are to be filled in. Blanks that are not used should be filled in with "N/A" or a line drawn through the blank. Please print.

Please attach the following items to this report form and indicate with an "X" in the box.

1. ALL CHAIN OF CUSTODY FORMS	
2. All Reference Toxicant Data for each Organism used in Test and Current Control Charts for each Organism.	
3. All Raw Data (Bench Sheets) Pertaining to the Tests (i.e., all physical, chemical and biological measurements)	
4. All Result Calculations	
5. Discharge Monitoring Reports (DMRs) when Applicable	

Facility/Industry/Client Name: _____

NPDES Number: _____

County: _____

Name and Phone Number of Contract Laboratory: _____

Date(s) and Time(s) Test(s) Initiated: _____ End: _____

Name(s) of Person(s) Conducting Test(s) (Printed): _____

QA/QC Officer/Reviewer Signature: _____

Laboratory Report #: _____

Sampler's Name (Print): _____

Samples

DATE AND TIME COLLECTED	LAB SAMPLE #	GRAB	24-H COMP.	ARRIVAL TEMP. °C	TYPE OF REFRIG. USED IN TRANS.	SAMPLE DELIVR. BY:	*SAMPLE AERATED	SAMPLE FILTERED

* If samples are aerated please describe in report.

****Reference Toxicant Data**

Name of Toxicant: _____

Dates of Test(s): _____

Species and Age: _____

In-house or Commercially Obtained Test Organisms: _____

LC₅₀ or IC₂₅: _____

****Please attach all ref. tox. raw data for each test organism used.**

SUMMARY OF TEST CONDITIONS

	CERIODAPHNIA DUBIA	PIMEPHALES PROMELAS
Test Type: Chronic or Acute		
Renewal or Non-renewal		
Test Concentrations (% Effluent)		
Age of Test Org.		
Amount and Type of food		
How often fed		
Test Chamber Volume		
Type of Chamber		
# of Org./Chamber		
# of reps.		
Description of Control Water		
Single, Multiple or Continuous Temp. Readings		

Test Results (Acute and/or Chronic)

TEST SPECIES	48-HOUR LC₅₀	96-HOUR LC₅₀	IC₂₅ SURVIVAL	IC₂₅ REPR. OR GROWTH

**EXHIBIT E to Chapter 1, Subchapters 1 and 2
ANTIDegradation IMPLEMENTATION METHODOLOGY**

**State of Mississippi
Water Quality Criteria for Intrastate,
Interstate, and Coastal Waters
Antidegradation Implementation Methods
January 28, 2010**

Prepared by

Mississippi Department of Environmental Quality

**Office of Pollution Control
Surface Water Division**



MDEQ

ANTIDegradation Implementation Methods
Forms and Instructions
(January 28, 2010)

I. Introduction

The Mississippi Department of Environmental Quality (MDEQ) State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters (WPC-2) provides:

“Antidegradation: The policy inherent in the standards shall be to protect water quality existing at the time these water quality standards were adopted and to upgrade or enhance water quality within the State of Mississippi. Waters whose existing quality is better than the established standards will be maintained at high quality unless the Commission finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In no event, however, may degradation of water quality interfere with or become injurious to existing instream water uses. Further, in no case will water quality be degraded below (or above) the base levels set forth in these standards for the protection of the beneficial uses described herein. In addition, the State will assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control. Where the Commission determines that high quality waters constitute an Outstanding National Resource, such as waters of National and State Parks and Wildlife Refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected. For the purposes of this rule, existing uses are defined as those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the Water Quality Criteria.”

Further, the federal antidegradation policy (40 CFR Section 131.12(a)(2)) provides:

“Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected, unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.”

Each state or tribe is required to identify methods for implementation of its antidegradation policy (40 CFR Section 131.12(a)):

“The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart.”

On June 25, 2008, the State of Mississippi's antidegradation policy was determined by the United States Environmental Protection Agency, Region 4, to be consistent with the requirements of federal regulations.

II. Water Body Tiers

Antidegradation is generally considered in a tiered approach. Tier 1 waters are those waters in which the existing water quality does not support designated uses. Tier 2 waters are those waters in which the water quality meets or exceeds the mandatory minimum levels to support the Clean Water Act (CWA) goal of propagation of fish, shellfish, and wildlife, and recreation in and on such waters. Tier 3 waters are those high quality waters that constitute Outstanding National Resource Waters (ONRWs). MDEQ will decide which tier applies for State waters based on a review of applicable information as described below. All existing uses must be maintained and protected in all waters of the State regardless of whether they are considered a Tier 1, 2, or 3 water.

All waters in Mississippi are considered to be Tier 2 waters unless one of the following conditions is met:

- (1) the water is designated as an Outstanding National Resource Water (ONRW), in which case, it is a Tier 3 water;
- (2) the water is identified on Mississippi's current §303(d) list, in which case it is defined as a Tier 1 water with respect to the pollutant(s) causing impairment; or
- (3) the water has been subject to an established final Total Maximum Daily Load (TMDL), in which case it is defined as a Tier 1 water with respect to the pollutant(s) addressed by the TMDL.

Tier 1 Waters

Tier 1 waters are those water body segments that are known to be impaired by a pollutant. Such waters have an established as final TMDL or are listed in the State's most recently adopted §303(d) list. For Tier 1 waters, the antidegradation policy is implemented through the State's NPDES Permit Issuance Process. New or expanding discharges are not allowed in Section 303(d) listed waters if there is an increase in pollutants proposed for which the water is listed, unless there is a TMDL developed that can be attained due to available assimilative capacity within the wasteload allocation as part of the TMDL. Tier 1 water bodies are pollutant specific, and this designation does not relieve a permit applicant from the requirements of an antidegradation report for this or other "non-listed" pollutants as required proposed to be discharged.

Tier 2 Waters

Tier 2 waters are those water bodies that:

- (1) have been determined to have assimilative capacity based on assessment of water quality data and/or water quality modeling tools; or
- (2) are assumed to have assimilative capacity because there are insufficient data or information to conclude that there is no assimilative capacity.

An antidegradation report is required for all proposed new or expanding discharges into Tier 2 waters. The level of detail involved in an antidegradation review will generally be dependent upon the State's judgment of the potential impact on water quality from a proposed activity considering factors such as the type of activity (e.g., covered by a general or individual permit) and magnitude of the discharge (e.g., major or minor).

Tier 3 Waters

When the Commission determines that high quality waters constitute an Outstanding National Resource, such as waters of National and State Parks and Wildlife Refuges and waters of exceptional recreational or ecological significance, the water quality of such waters shall be maintained and protected by adopting Tier 3 designation. Tier 3 waters are considered Outstanding National Resource Waters (ONRW). In order to achieve this designation, the stream must be nominated as a Tier 3 ONRW and adopted by the Mississippi Commission on Environmental Quality (MCEQ). Any person may submit a nomination to the Commission which will include the rationale and documentation citing the historical, recreational or ecological significance of the water body. The submission must include documentation as shown in Exhibit G. Upon receipt of the nomination, the Commission staff will review the water body, assess any available data or information to determine the impairment status, identify the current NPDES permits in the watershed, and make a recommendation to the Commission for consideration. If adopted as a Tier 3 water, the water body will not be allowed to experience any further permanent degradation.

III. Applicability of Antidegradation Policy Review Methods

The methods outlined herein focus on how the State will implement the antidegradation policy for discharges to surface waters. The methods include the following components:

- (1) A determination of the impact of the discharge upon state waters;
- (2) alternatives analysis;
- (3) socio-economic issues;
- (4) a preliminary State antidegradation decision;
- (5) public review/input; and
- (6) a final State decision.

A report regarding compliance with the antidegradation policy shall be conducted for all new or expanding wastewater discharges into Mississippi surface waters that require an NPDES permit. NPDES Permit reissuances will not be subject to the report procedures provided there are no proposed changes to the facility's effluent which would result in increases in pollutant loadings. General permit coverage will undergo an antidegradation review. MDEQ will conduct the antidegradation review for each activity for which a Notice of Intent (NOI) to discharge is received for coverage under a general permit. The procedures for general permits follow:

- (1) An application is received for coverage (NOI).
- (2) The NOI is posted on MDEQ's website at http://opc.deq.state.ms.us/report_gnp_notice.aspx. Typically, the notice is posted for at least a 10-day period prior to action on the NOI.
- (3) The permit manager uses the NOI application and other available data and information to answer a list of questions that relate to a proposed project including alternatives analysis and socio-economic issues.
- (4) The information in the completed project awareness checklist provides the basis for MDEQ to complete its antidegradation review.
- (5) If, based on the results of the antidegradation review, MDEQ determines that the applicant can receive coverage under a general permit, notice of coverage by a general permit is posted on MDEQ's website at: http://opc.deq.state.ms.us/report_gnp_issued.aspx.
- (6) If, based on the results of the antidegradation review, MDEQ determines that the applicant cannot receive coverage; the applicant must apply for an individual NPDES permit and fulfill the requirements of Section IV of this methodology.

IV Required Antidegradation Components

The antidegradation report requirements must be addressed as described in this section and contained in the forms attached hereto. The **Antidegradation Instruction Form** along with the **Calculation of Total Annualized Project Costs** worksheets should be incorporated into the appropriate NPDES application forms.

These forms shall be completed by all individual NPDES permit applicants for new discharges or existing discharges with proposed effluents that contain new or additional pollutants or an increase in flow that results in an increase in pollutant loading. Antidegradation requires documentation that discharge and treatment alternatives and socio-economic impacts have been evaluated and considered. The applicant may utilize EPA's "The Interim Economic Guidance for Water Quality Standards Workbook" dated March, 1995, for guidance in completing the report.

Project Information

The applicant should supply the required information from the Antidegradation Instruction Form providing the specific information regarding the name and other pertinent details of the proposed discharge. The location information and/or a map must be provided. The proposed effluent discharge flow details should also be given in this section. MDEQ reserves the right to require

completion of the remaining sections of the Antidegradation Instruction Form for any proposed NPDES permit application.

Alternatives Analysis

An analysis of alternatives is required to ensure that the applicant has considered alternatives that would reduce impacts to state surface waters. The analysis should include a description of each alternative in terms of both technical and economic feasibility. Alternatives to be considered should include (but are not limited to):

- (1) a centralized no discharge system;
- (2) connection to an existing wastewater treatment facility;
- (3) an alternative discharge point; and
- (4) product or raw material substitution.

Alternatives may also consider:

- (5) other treatment options which would reduce the predicted impact to the stream;
- (6) improved operation and maintenance of existing treatment operations;
- (7) seasonal or controlled discharge options to avoid critical conditions; and
- (8) pollution prevention, increased efficiency, water conservation, recycle or reuse alternatives.

Socio-Economic Impacts Analysis

Socio-economic or environmental / public health issues may be considered as justifications for lowering water quality. This analysis is not necessary if a non-degrading alternative is chosen following the alternatives analysis.

Factors to be considered in making a determination include:

- (1) employment (increasing production and jobs, maintaining, or avoiding reduction in employment);
- (2) improved community tax base; and
- (3) correction of an environmental or public health problem; and
- (4) providing a social benefit to the community.

The Interim Economic Guidance for Water Quality Standards Workbook, published by the U.S. Environmental Protection Agency, March 1995, may be used as a guide in preparing this analysis.

Public Review / Input

Prior to issuance of an individual NPDES permit, the proposed permit is sent to public notice in accordance with the Environmental Permits Division's administrative procedures. The NPDES permit public notice will state that an antidegradation report has been prepared for the project and is available for public inspection. All applications for coverage under a general permit will

consider available alternatives and socio-economic issues. Public notice of proposed general permit coverage is accomplished by website notification.

Final Action

At the completion of the public review / input process, any comments received will be reviewed and considered to determine if changes should be made to the proposed discharge permit. Significant changes may require an update to the antidegradation report for the project and/or an additional public notice.

**ANTIDEGRADATION INSTRUCTION FORM
FOR NEW/EXPANDING DISCHARGES TO TIER 2 WATERS
Individual Permits**

Project Information

The information in this section is not required again if it has already been provided with the NPDES permit application or request for coverage under a general permit.

- Name of project
- Location of project (map showing proposed discharge point and location of treatment facility)
- Proposed treatment type
- Proposed influent constituents
- Proposed design flow
- Name of discharge stream
- Latitude and Longitude of discharge point if available
- Contact information for permit applicant
- Is the applicant seeking coverage under a general permit for this discharge?

Alternatives Analysis

The demonstration should include, but not be limited to, consideration of the alternatives listed below:

- (1) a centralized no discharge system;
- (2) connection to an existing wastewater treatment facility;
- (3) an alternative discharge point; and
- (4) product or raw material substitution.

Alternatives may also consider:

- (5) other treatment options which would reduce the predicted impact to the stream;
- (6) improved operation and maintenance of existing treatment operations;
- (7) seasonal or controlled discharge options to avoid critical conditions; and
- (8) pollution prevention, increased efficiency, water conservation, recycle or reuse alternatives.

The applicant should consider if the alternative is technically feasible. If it is technically feasible, then the applicant must consider if it is economically feasible. If the alternative is economically feasible, then degradation of the stream may not occur. If the alternative is not feasible, then the next alternative should be considered. Documentation is required for all technical and economic feasibility considerations.

The applicant must complete the **Calculation of Total Annualized Project Costs** worksheet for each technically feasible alternative considered. Then the Total Annualized Project Cost for each alternative must be compared to the chosen alternative. Those alternatives that have a Total Annualized Project Cost less than 110% of the chosen alternative are considered economically feasible.

Social and Economic Impact Analysis

All applicants for a new or expanded discharge must demonstrate that the proposed discharge is necessary for important economic or social development in the area. This section is not applicable if a non-degrading alternative such as a no discharge system or connection to an existing treatment facility has been selected.

Socio-economic or environmental / public health issues which would justify the proposed discharge may include:

- (1) employment (increasing production and jobs, maintaining, or avoiding reduction in employment);
- (2) improved community tax base; and
- (3) correction of an environmental or public health problem; and
- (4) provide a social benefit to the community.

The applicant should estimate the number of new jobs (both direct and indirect jobs) created as a result of the project. Documentation should also predict the effect of the new jobs on the local and state tax base – i.e. tax revenues expected to be gained by local and state governments and/or any other economic benefits.

The permit applicant should document any existing environmental or public health problem, as well as the expected effect of the proposed project on the existing problem.

For example, a description of the environmental benefits from a proposed wastewater treatment plant which will take failing septic tanks offline.

Others – Please list and describe.

MDEQ may require additional documentation and calculations or require consideration of other alternatives as necessary to justify the proposed degradation.

Calculation of Total Annualized Project Costs

This form must be completed for the chosen alternative. All figures presented must be supported with documentation.

Capital Costs

Chosen Alternative

Alternative _____

Capital Cost of Project (show a breakout of costs on a separate sheet) \$ _____

Other One-Time Costs of Project
(Please List, if any):

_____ \$ _____

_____ \$ _____

_____ \$ _____

Total Capital Costs (Sum columns) \$ _____

Interest Rate Used (expressed as decimal) (i) _____

Time Period of Financing (in years) (n) _____

Annualization Factor (or see Table of Annualization Factors) $\frac{i(1+i)^n}{(1+i)^n - 1}$ (af) _____

Annualized Capital Cost [(Total Capital Cost) x (af)] (acc) \$ _____

Operating and Maintenance Costs

List Annual Costs of Operation and Maintenance (O&M) (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.)

_____ \$ _____

_____ \$ _____

Total Annual O & M Costs (Sum column) \$ _____

Total Annual Cost of Project \$ _____

Calculation of Total Annualized Project Costs For No Discharge Alternative

This form must be completed for the no discharge alternative considered. All figures presented must be supported with documentation.

Capital Costs

No Discharge Alternative

Alternative _____

Capital Cost of Project (show a breakout of costs on a separate sheet) \$ _____

Other One-Time Costs of Project
(Please List, if any):

_____ \$ _____

_____ \$ _____

_____ \$ _____

Total Capital Costs (Sum columns) \$ _____

Interest Rate Used (expressed as decimal) (i) _____

Time Period of Financing (in years) (n) _____

Annualization Factor
(or see Table of
Annualization Factors)

$$\frac{i(1+i)^n}{(1+i)^n - 1}$$

(af) _____

Annualized Capital Cost [(Total Capital Cost) x (af)] (acc) \$ _____

Operating and Maintenance Costs

List Annual Costs of Operation and Maintenance (O&M) (including but not limited to: monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement.)

_____ \$ _____

_____ \$ _____

Total Annual O & M Costs (Sum column) \$ _____

Total Annual Cost of Project \$ _____

Table of Annualization Factors

Year	Interest Rate											
	0.0050	0.0100	0.0150	0.0200	0.0250	0.0300	0.0350	0.0400	0.0450	0.0500	0.0550	0.0600
1	1.0050	1.0100	1.0150	1.0200	1.0250	1.0300	1.0350	1.0400	1.0450	1.0500	1.0550	1.0600
2	0.5038	0.5075	0.5113	0.5150	0.5188	0.5226	0.5264	0.5302	0.5340	0.5378	0.5416	0.5454
3	0.3367	0.3400	0.3434	0.3468	0.3501	0.3535	0.3569	0.3603	0.3638	0.3672	0.3707	0.3741
4	0.2531	0.2563	0.2594	0.2626	0.2658	0.2690	0.2723	0.2755	0.2787	0.2820	0.2853	0.2886
5	0.2030	0.2060	0.2091	0.2122	0.2152	0.2184	0.2215	0.2246	0.2278	0.2310	0.2342	0.2374
6	0.1696	0.1725	0.1755	0.1785	0.1815	0.1846	0.1877	0.1908	0.1939	0.1970	0.2002	0.2034
7	0.1457	0.1486	0.1516	0.1545	0.1575	0.1605	0.1635	0.1666	0.1697	0.1728	0.1760	0.1791
8	0.1278	0.1307	0.1336	0.1365	0.1395	0.1425	0.1455	0.1485	0.1516	0.1547	0.1579	0.1610
9	0.1139	0.1167	0.1196	0.1225	0.1255	0.1284	0.1314	0.1345	0.1376	0.1407	0.1438	0.1470
10	0.1028	0.1056	0.1084	0.1113	0.1143	0.1172	0.1202	0.1233	0.1264	0.1295	0.1327	0.1359
11	0.0937	0.0965	0.0993	0.1022	0.1051	0.1081	0.1111	0.1141	0.1172	0.1204	0.1236	0.1268
12	0.0861	0.0888	0.0917	0.0946	0.0975	0.1005	0.1035	0.1066	0.1097	0.1128	0.1160	0.1193
13	0.0796	0.0824	0.0852	0.0881	0.0910	0.0940	0.0971	0.1001	0.1033	0.1065	0.1097	0.1130
14	0.0741	0.0769	0.0797	0.0826	0.0855	0.0885	0.0916	0.0947	0.0978	0.1010	0.1043	0.1076
15	0.0694	0.0721	0.0749	0.0778	0.0808	0.0838	0.0868	0.0899	0.0931	0.0963	0.0996	0.1030
16	0.0652	0.0679	0.0708	0.0737	0.0766	0.0796	0.0827	0.0858	0.0890	0.0923	0.0956	0.0990
17	0.0615	0.0643	0.0671	0.0700	0.0729	0.0760	0.0790	0.0822	0.0854	0.0887	0.0920	0.0954
18	0.0582	0.0610	0.0638	0.0667	0.0697	0.0727	0.0758	0.0790	0.0822	0.0855	0.0889	0.0924
19	0.0553	0.0581	0.0609	0.0638	0.0668	0.0698	0.0729	0.0761	0.0794	0.0827	0.0862	0.0896
20	0.0527	0.0554	0.0582	0.0612	0.0641	0.0672	0.0704	0.0736	0.0769	0.0802	0.0837	0.0872

Year	Interest Rate											
	0.0650	0.0700	0.0750	0.0800	0.0850	0.0900	0.0950	0.1000	0.1050	0.1100	0.1150	0.1200
1	1.0650	1.0700	1.0750	1.0800	1.0850	1.0900	1.0950	1.1000	1.1050	1.1100	1.1150	1.1200
2	0.5493	0.5531	0.5569	0.5608	0.5646	0.5685	0.5723	0.5762	0.5801	0.5839	0.5878	0.5917
3	0.3776	0.3811	0.3845	0.3880	0.3915	0.3951	0.3986	0.4021	0.4057	0.4092	0.4128	0.4163
4	0.2919	0.2952	0.2986	0.3019	0.3053	0.3087	0.3121	0.3155	0.3189	0.3223	0.3258	0.3292
5	0.2406	0.2439	0.2472	0.2505	0.2538	0.2571	0.2604	0.2638	0.2672	0.2706	0.2740	0.2774
6	0.2066	0.2098	0.2130	0.2163	0.2196	0.2229	0.2263	0.2296	0.2330	0.2364	0.2398	0.2432
7	0.1823	0.1856	0.1888	0.1921	0.1954	0.1987	0.2020	0.2054	0.2088	0.2122	0.2157	0.2191
8	0.1642	0.1675	0.1707	0.1740	0.1773	0.1807	0.1840	0.1874	0.1909	0.1943	0.1978	0.2013
9	0.1502	0.1535	0.1568	0.1601	0.1634	0.1668	0.1702	0.1736	0.1771	0.1806	0.1841	0.1877
10	0.1391	0.1424	0.1457	0.1490	0.1524	0.1558	0.1593	0.1627	0.1663	0.1698	0.1734	0.1770
11	0.1301	0.1334	0.1367	0.1401	0.1435	0.1469	0.1504	0.1540	0.1575	0.1611	0.1648	0.1684
12	0.1226	0.1259	0.1293	0.1327	0.1362	0.1397	0.1432	0.1468	0.1504	0.1540	0.1577	0.1614
13	0.1163	0.1197	0.1231	0.1265	0.1300	0.1336	0.1372	0.1408	0.1444	0.1482	0.1519	0.1557
14	0.1109	0.1143	0.1178	0.1213	0.1248	0.1284	0.1321	0.1357	0.1395	0.1432	0.1470	0.1509
15	0.1064	0.1098	0.1133	0.1168	0.1204	0.1241	0.1277	0.1315	0.1352	0.1391	0.1429	0.1468
16	0.1024	0.1059	0.1094	0.1130	0.1166	0.1203	0.1240	0.1278	0.1316	0.1355	0.1394	0.1434
17	0.0989	0.1024	0.1060	0.1096	0.1133	0.1170	0.1208	0.1247	0.1285	0.1325	0.1364	0.1405
18	0.0959	0.0994	0.1030	0.1067	0.1104	0.1142	0.1180	0.1219	0.1259	0.1298	0.1339	0.1379
19	0.0932	0.0968	0.1004	0.1041	0.1079	0.1117	0.1156	0.1195	0.1235	0.1276	0.1316	0.1358
20	0.0908	0.0944	0.0981	0.1019	0.1057	0.1095	0.1135	0.1175	0.1215	0.1256	0.1297	0.1339

EXHIBIT F to Chapter 1, Subchapters 1 and 2 - BIBLIOGRAPHY

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The Department may utilize any document which is approved by the Department and/or EPA and/or duly promulgated through the Federal Administrative Procedures Act, and/or is scientifically defensible.

EXHIBIT G to Chapter 1, Subchapters 1 and 2
TIER 3 NOMINATION DOCUMENTATION REQUIREMENTS

The following information, documentation, and data shall be provided to the Commission by any person nominating a water body for Tier 3 or ONRW status:

- 1) A United States Geological Survey 7.5 minute topographic map or its equivalent as approved by the Commission showing those surface waters to be nominated including a description consisting of a river mile index with any existing and proposed discharge points;
- 2) Existing uses and water quality data for the surface water for which the nomination is proposed. If adequate data are unavailable, additional studies may be required by the Commission;
- 3) Descriptions of general land uses and specific land uses adjacent to the surface water for which the nomination is proposed;
- 4) The existing and designated uses of the water upstream and downstream of the proposed water body;
- 5) General physical characteristics of the surface water including width, depth, bottom composition, and slope;
- 6) The frequency of occasions when there is no natural flow in the surface water, and the 7Q10 and harmonic mean flow values for the surface water and adjacent surface waters;
- 7) An assessment of the existing and potential aquatic life habitat in the surface water under consideration and the adjacent upstream surface waters. The existing aquatic life shall be documented including the occurrence of individuals or populations, indices of diversity and well-being, and abundance of species of any unique native biota;
- 8) A documented rationale as to why the water qualifies for the nomination; and the rationale used to support the national significance of the water;
- 9) A listing of the types of persons, businesses, and organizations likely to be impacted by the change in Tier designation. Current users, downstream users, and potential future users of the water body and the surrounding land are the types of persons, businesses and organizations likely to be impacted by the change in designation. Those potentially impacted include cities, townships, permit holders, environmental organizations, and recreational users.

Subchapter 3: Water Quality Certification of Activities Requiring Federal Licenses or Permits

Rule 1.3.1 Background and General Requirements.

A. Background. Section 401 of the Federal Act, 33 U. S. C. Section 1341, requires any applicant for a Federal license or permit to conduct any activity which may result in any discharge into the waters of the United States to provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate that any discharge will comply with the applicable provisions of §§ 301, 302, 303, 306 and 307 of the Federal Act, 33 U. S. C. §§ 1311, 1312, 1313, 1316 and 1317. Miss. Code Ann. § 49-2-7 provides that the Department shall be responsible for conserving, managing, developing and protecting the natural resources of the State of Mississippi. In addition, Miss. Code Ann. § 49-17-28 authorizes the Mississippi Environmental Quality Permit Board to issue water quality certifications required by Section 401 of the federal Clean Water Act.

B. General Requirements of Section 401 Certification.

- (1) These regulations establish procedures and policies for implementing State water quality certification requirements of Section 401 of the Federal Act, 33 U.S.C. § 1341 ("§ (Section) 401 Certification"), which is incorporated herein and adopted by reference.
- (2) Pursuant to Miss. Code Ann. § 49-17-28(3) and § 49-17-28(3)(a), the Executive Director is authorized to make decisions on issuance, reissuance, denial, modification, and revocation of water quality certifications on projects regarding which the Department has received no written adverse comments. Additionally, the Permit Board may authorize the Executive Director to implement these regulations and to make decisions on issuance, reissuance, denial, modification, and revocation of water quality certifications for other projects, including projects regarding which the Department receives adverse written comments. The Executive Director may further delegate this authority to appropriate Department staff members, pursuant to Miss. Code Ann. §§ 49-2-13(a) and (c) and 49-17-29(3)(a). For purposes of Miss. Code Ann. § 49-17-29(3)(a), the word "permit" in the phrase "permit issuance, reissuance, denial, modification or revocation" and in the phrase "all other permits within the jurisdiction of the Permit Board," includes water quality certification actions taken pursuant to these regulations. The term "Department" in Rule 1.3.2 through 1.3.4 means:
 - (a) In a case where the Permit Board has authorized the Executive Director or Department staff to act on a certification, the Department acting through or under the direction of the Executive Director or the Executive Director (her/him)self; or

- (b) In a case where the Permit Board has not authorized the Executive Director to act on a certification, or where the Executive Director has determined that the action should be taken by the Permit Board, the Permit Board.

In Rule 1.3.5 and 1.3.6, the terms "Department" and "Permit Board" are specific to those entities.

- (3) Any applicant for a federal license or permit to conduct any activity which during construction or operation may result in any discharge to waters of the United States shall first obtain a certification from the Department that any such discharge will comply with the applicable provisions of §§ 301, 302, 303, 306 and 307 of the Federal Act (33 U. S. C. §§ 1311, 1312, 1313, 1316, and 1317). Section 401 provides that no federal license or permit shall be granted until such certification is obtained. Federal permits or licenses for which certification is required include, but are not limited to, the following:
 - (a) individual, general or nationwide Federal permits issued pursuant to § 404 of the Federal Act, 33 U.S.C. § 1344;
 - (b) federal permits issued pursuant to § 10 of the Federal Rivers and Harbors Act, 33 U.S.C. § 403;
 - (c) permits or licenses issued by the Federal Energy Regulatory Commission, 16 U.S.C. §1791, et seq.;
 - (d) permits or licenses issued by the United States Coast Guard, Bridge Administration Branch;
 - (e) any other federal permit or license to conduct any activity which may result in any discharge to waters of the United States.
- (4) Certification action is not required with regard to permits issued under federal law for which the State has received authority from the Administrator to issue, such as NPDES permits required under Section 402 of the Federal Act.
- (5) The Department may issue, deny or revoke certifications for categories of activities or for activities specified in Federal nationwide or general dredge and fill permits pursuant to federal law or regulations.
- (6) Any certification issued shall state that any discharge shall comply with applicable provisions of §§ 301, 302, 303, 306 and 307 of the Federal Act (33 U. S. C. §§ 1311, 1312, 1313, 1316, and 1317) and all State laws and regulations promulgated pursuant to the aforementioned sections of the Federal Act.

- (7) Any certification issued shall set forth limitations, conditions, and/or monitoring requirements necessary to assure (a) maintenance of classified or existing water uses and standards and (b) compliance with other requirements of these regulations or other appropriate requirements of State law and/or regulations. Monitoring requirements may include, but are not limited to, chemical analysis of water, sediment or fill material, and bioassays to determine potential water quality impacts of dredged material in accordance with EPA approved methods and/or the methods set forth in this Chapter.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.3.2 Applications.

A. The application for certification shall be the public notice issued by the Federal permitting or licensing agency. The date of receipt of the public notice will be considered the date of application for certification if the application is deemed complete by the Department. To be deemed complete by the Department, all applications for certification shall at a minimum contain the information that follows:

- (1) the name, address, phone numbers, principal place of business of the applicant and, if applicable, the name and address of the agent for the applicant;
- (2) a complete description of the proposed activity, including the location, adjacent water body(s), purpose and intent of the project, maps, drawings, and plans (detailed engineering plans and specifications are not required);
- (3) a description of all proposed discharges and/or other activities associated with the proposed activity, including planned or proposed future development by the applicant;
- (4) a description of the composition, source, and quantity of any material to be dredged or used as fill and a description of the area to be impacted;
- (5) the method of dredging or filling and specific plans for disposal and control of dredge spoils; and
- (6) the names and addresses of adjacent property owners.

Potential applicants are encouraged to contact the Department prior to submitting an application.

B. The Department may require the applicant to provide water quality monitoring data, water quality modeling results, or other information necessary to complete the certification review.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.3.3 Public Notice and Public Hearing.

- A. Public Notice. Public notice of all applications for § 401 certification is required. Public notice may be accomplished through either a joint public notice between the federal and/or state agency and the Department or a public notice by the applicant at his expense.
 - (1) Joint public notice procedures with federal or state agencies are normally used to facilitate processing.
 - (2) If a joint public notice procedure is not implemented, public notice shall be accomplished by publication by the applicant in a newspaper having general circulation in the area in which the activity is proposed or throughout the State. The Department shall provide the applicant with the format for publication.
 - (3) The public notice of the application for certification shall provide a reasonable period of time, normally at least 30 days from the date of notice, within which interested persons may submit to the Department their comments and information concerning the certification application.
- B. Public Hearing.
 - (1) Any person may request a public hearing during the comment period. Requests shall be in writing addressed to the Department and shall state the issues to be raised at the hearing.
 - (2) The Department shall hold a public hearing whenever the Department determines such a hearing may be useful in reaching a decision on an application for certification. The public hearing shall be held within thirty (30) days after the Department makes its determination, and notifies the applicant. The Department shall coordinate with other regulatory agencies and conduct joint public hearings when feasible. The decision of whether public hearings shall be held jointly or independently will be made on a case-by-case basis.
 - (3) All public hearings shall be reported verbatim by a court reporter. A copy of the transcript shall be made available for public inspection.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.3.4 Scope of Review for Application Decisions.

- A. Factors. The factors related to the construction and operations of the activity which must be addressed by the applicant and will be considered in determining certification action are as follows:

- (1) feasible alternatives to the activity;
- (2) mitigation;
- (3) initial and secondary impacts on all existing and all classified uses of the waters of the State;
- (4) degree of compliance of the proposed activity with the State of Mississippi Water Quality Criteria for Intrastate, Interstate, and Coastal Waters;
- (5) degree of physical, chemical, and biological impacts on waters of the State;
- (6) the effect on circulation patterns and water movement on waters of the State;
- (7) degree of alteration of the aquatic ecosystem;
- (8) degree of consistency with approved water quality management plans adopted by the Commission;
- (9) storm water management;
- (10) compliance history of the applicant; and
- (11) any other factors deemed to be necessary by the Department to protect water quality.

B. Denial. After consideration of the factors in Rule 1.3.4.A, a decision to issue or deny certification shall be made. However, it is the policy of the Department to deny certification when any of the following determinations are made unless the Department is assured that appropriate measures will be taken to eliminate unreasonable degradation and irreparable harm to waters of the State.

- (1) The proposed activity permanently alters the aquatic ecosystem such that water quality criteria are violated and/or it no longer supports its existing or classified uses. An example is the channelization of streams.
- (2) There is a feasible alternative to the activity which reduces adverse consequences on water quality and classified or existing uses of waters of the State.
- (3) The proposed activity adversely impacts waters containing State or federally recognized threatened or endangered species.

- (4) The proposed activity adversely impacts a special or unique aquatic habitat, such as National or State Wild and Scenic Rivers and/or State Outstanding Resource Waters.
- (5) The proposed activity in conjunction with other activities may result in adverse cumulative impacts.
- (6) Nonpoint source/storm water management practices necessary to protect water quality have not been proposed.
- (7) Denial of wastewater permits and/or approvals by the State with regard to the proposed activities.
- (8) The proposed activity results in significant environmental impacts which may adversely impact water quality.

C. Criteria. The Department has developed a number of criteria which the applicant must substantially satisfy when the proposed activity involves any of the items addressed below.

- (1) Excavated Canals. These canals generally have flow and circulation less than that of the parent body of water and can become traps for organic material, nutrients and pollutants, resulting in a decline in water quality. Due to this potential for water quality degradation, the Department discourages canals. If no feasible alternatives are available, the Department has formulated a set of design and construction criteria to minimize the anticipated adverse water quality impacts. These criteria must be substantially satisfied in order for certification issuance to be considered. The criteria with regard to canals is attached hereto as Exhibit A and incorporated herein by reference.
- (2) Marinas. Numerous construction, development and operation activities at a marina can adversely impact water quality. In order to prevent potential adverse water quality impacts, the Department has formulated a set of criteria for marina development. These criteria must be substantially satisfied in order for certification issuance to be considered. The criteria with regard to marinas is attached hereto as Exhibit B and incorporated herein by reference.
- (3) Sand and Gravel Mining Within or Adjacent to Streams. Potential physical effects of excavations adjacent to streams and sand/gravel mining within stream banks include, but are not limited to, stream channel modifications, such as alteration of flow patterns, sediment transport, increased headcutting and channelization. These effects may adversely impact water quality by causing increased turbidity, reduced light penetration, resuspension of pollutants, increased water temperatures, and decreased dissolved oxygen. All sand and gravel mining activities which require a Section 401 Water Quality Certification

shall be evaluated in accordance with Rule 1.3.4.A and B. In addition, the Department shall consider the following in evaluating sand and gravel mining within or adjacent to streams.

- (a) **Excavations Adjacent to Streams.** To prevent adverse water quality impacts resulting from excavations adjacent to streams, the Department shall require a buffer zone between the mining activity and adjacent water bodies. A buffer zone (natural or undisturbed greenbelt on the perimeter of a land disturbing activity) shall be measured as the distance between the edge of the mining activity and the highest point of the top bank of the stream. Mining activity includes, but is not limited to, extraction operations, stockpiling of overburden or sand and gravel, gravel washing operations and sedimentation ponds. The purpose of the buffer zone is to prevent nonpoint source impacts and channel and hydraulic modifications. Channel and hydrologic modifications occur when the water body captures a mining pit during high water. The width of the buffer zone shall be based on the stream size. The buffer zone requirements for excavations adjacent to streams are as follow:
 - (1) **Intermittent Streams.** Mining activities adjacent to intermittent streams shall normally have a 50-foot buffer zone. Intermittent streams will generally be indicated by a broken blue line on the latest version of the United States Department of the Interior Geological Survey Quadrangle Map (Scale 1:24,000, 7.5 minute series). The applicant may file a written request with the Department to reroute an intermittent stream, either temporarily or permanently, to avoid the mining activity. The Department shall approve the applicant's request only if the applicant can demonstrate that no significant adverse water quality impacts will result from the rerouting. In the event the Department approves the rerouting of an intermittent stream, appropriate erosion and siltation controls shall be implemented. Slopes shall normally be graded to 3 to 1 (horizontal to vertical) or flatter and seeded with a native species of grass to prevent erosion. The Department may require a different slope, on a case-by-case basis, as long as the slope is protective of the integrity of the stream bank and water quality.
 - (2) **Perennial Streams.** Mining activities adjacent to perennial streams shall normally have a 150-foot buffer zone. Perennial streams will generally be indicated by a solid blue line on the latest version of the United States Department of the Interior Geological Survey Quadrangle Map (Scale 1:24,000, 7.5 minute series). When a perennial stream is also classified as a navigable waterway, the requirements regarding navigable waterways shall be applied.

- (3) Navigable Waterways. Mining activities adjacent to navigable waterways shall normally have a 300-foot buffer zone. Navigable waterways are defined and designated by the U. S. Army Corps of Engineers pursuant to Section 10 of the Rivers and Harbors Act.

The Department may require a different buffer zone, on a case by case basis, as long as the buffer zone is protective of water quality. In determining whether a different buffer zone is appropriate, the Department may consider factors including, but not limited to, the stability of the stream banks and the existing uses of the stream and adjacent areas.

- (b) Sand/Gravel Mining within Stream Banks. The two types of sand/gravel mining within stream banks include sand/gravel bar mining in-the-dry and sand/gravel mining in-the-wet¹³. To prevent adverse water quality impacts, the Department has formulated a set of criteria for sand/gravel bar mining in-the-dry. These criteria are attached hereto as Exhibit C and incorporated herein by reference. Except as otherwise provided in these regulations, sand/gravel mining in-the-wet may be allowed if the applicant can demonstrate to the satisfaction of the Department that the water quality impacts associated with the proposed activity are minor. In assessing the impacts on water quality, the Department shall consider these activities on a case-by-case basis in accordance with the factors set forth in Rule 1.3.4 .A and B.
- (4) Development Requiring Storm Water Management. Nonpoint source pollution is a significant obstacle to preserving and improving the quality of our state's waterways. In order to prevent adverse water quality impacts, the Department has formulated a set of criteria for storm water management. These criteria must be substantially satisfied in order for certification issuance to be considered. The criteria with regard to storm water management is attached hereto as Exhibit D and incorporated herein by reference. These storm water runoff criteria are separate from any Storm Water Pollution Prevention Plan (SWPPP) required under any required storm water permit.
- (5) Certain Existing Subdivisions on the Mississippi Gulf Coast originally platted in lands which, because of the passage of the Federal Act and related laws and/or regulations, are presently unsuitable for development.

¹³ "Sand/gravel bar mining in-the-dry" is mining in such a manner that no equipment or dredged material is in contact with flowing water, that the soil/water or groundwater interface is not touched by the equipment and that infiltration in the mining site is not pumped into the stream. "Sand/gravel mining in-the-wet" is mining in such a manner that equipment and dredged material may come in contact with water.

Several coastal subdivisions were platted prior to the passage of a number of pertinent regulatory laws, including but not limited to, Sections 401 and 404 of the Federal Act. These subdivisions typically have waterfront access to estuarine waters by man-made canals, have inadequate sewage treatment, and require filling of productive salt marsh. Current law and regulatory policy would not allow the platting and/or development of such subdivisions due to adverse environmental impacts. However, in an attempt to allow residential development to proceed in existing platted and partially developed subdivisions, while addressing water quality concerns, the Department has formulated a set of criteria that must be substantially satisfied in order for certification issuance to be considered. The criteria with regard to residential development in such subdivisions is attached hereto as Exhibit E and incorporated herein by reference.

Notwithstanding the criteria set forth above, the Department may develop criteria for other proposed activities which may have an adverse impact on water quality.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.3.5 Enforcement of Certification Decisions and Conditions

- A. Any certification shall set forth any effluent limitations, other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations under 33 U. S. C. §§ 1311 or 1312, standard of performance under 33 U. S. C. § 1316 or prohibition, effluent standard, or pretreatment standard under 33 U. S. C. § 1317, and with any other appropriate requirement of State law set forth in such certification. A certification condition becomes a condition of the Federal license or permit. For purposes of Miss. Code Ann. § 49-17-43, a violation of a certification condition is deemed a violation of a permit issued by the Permit Board.
- B. Certification conditions are subject to enforcement proceedings available to the federal agency issuing the permit or license. Other proceedings under State law, including modification and/or revocation and/or suspension of certification and enforcement actions pursuant to Miss. Code Ann. § 49-17-43, may also be used to correct or prevent adverse water quality impacts resulting from construction or operation of activities for which certification has been issued.
- C. The Department may conduct inspections for determining compliance with certification conditions.
- D. Nothing in these regulations shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 1.3.6 Review and Appeals.

A. Review of Certification Denial through Informal Review and Formal Hearings.

- (1) Prior to the denial of an application for certification, the Department shall issue a notice of intent to deny certification to the applicant. Upon receipt of the notice of intent to deny, the applicant is encouraged immediately to contact the Department for further discussions regarding the application for certification.
- (2) Within thirty days after the date the Department denies and/or revokes certification, an applicant may file a written request for an informal review with the Department. The Department shall fix the time and place of such informal review and shall notify the applicant thereof.
- (3) Within thirty days after (1) the date the Department denies certification or (2) the date of the informal review in which the Department makes a decision to continue to deny certification, the applicant may file a written request for a formal hearing before the Permit Board. The request shall set forth grounds for the hearing request and be made in accordance with Miss. Code Ann § 49-17-29(4)(b).
- (4) If an initial decision to deny the application is made by the Permit Board instead of by the Department, the applicant may request a formal hearing before the Permit Board pursuant to Miss. Code Ann. § 49-17-29(b).

B. Review of Other Certification Actions. Any interested party aggrieved by an action of the Department or the Permit Board concerning a water quality certification may request a formal hearing before the Permit Board within thirty days after the date the Permit Board takes action, as recorded in the minutes of the Permit Board, pursuant to Miss. Code Ann. § 49-17-29(b). "As recorded in the minutes of the Permit Board" means the date of the Permit Board meeting at which the action concerned is taken by the permit board.

C. Appeals of Certification Action. Following the formal hearing, the final action of the Permit Board upon such matters shall be conclusive unless the applicant perfects an appeal to the appropriate chancery court within twenty days of the Permit Board's action, as specified by Miss. Code Ann. § 49-17-29(4)(c) and (5).

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

EXHIBIT A to Chapter 1, Subchapter 3
CRITERIA FOR THE SITING AND DESIGN OF EXCAVATED CANALS

I. Criteria for Canal Design and Siting

- (a) Canals shall not be constructed or excavated in wetlands, creeks or natural drainage ways.
- (b) Canals should all have two or more connections to the parent body of water to allow greater flow through the system.
- (c) Canals shall not be box cut. Slopes of canal banks shall be one vertical to three horizontal or flatter to promote colonization by littoral vegetation, which provides nutrient uptake, habitat and bank stabilization. Any bulkheading shall be done above ordinary high water.
- (d) Canals shall be no deeper than -4 to -5 feet normal water level due to problems with incomplete mixing, poor reaeration, stratification, and depressed dissolved oxygen associated with excessive depths.
- (e) Excavation resulting in ridges or depressions within the canal shall be avoided due to limitations on water exchange.
- (f) Where feasible, canal projects shall be located on the run of a river rather than in a pool and backwater segment.
- (g) Canals shall be designed to maximize wind-induced mixing and other natural forms of reaeration. For example, the longest dimension of the canal should be oriented with prevailing winds. Complex geometric designs shall be avoided and keyhole boat slips shall not be placed off of the canal. The minimum bottom width of a canal shall be 100 feet in order to allow for reaeration.
- (h) Where feasible, designs shall have an enlarged surface area (a pool or embayment) which is shallower than the canal at the landward terminus. This design results in better water quality due to the enhanced effects of wind reaeration in the pool and in creased flow because of the storage area in the pool.

II. Wastewater Treatment

A central sewage collection and treatment system is the preferred method of wastewater treatment. Individual home disposal systems shall only be considered after a determination is made that other treatment methods are not economically feasible and State Department of Health approval shall then be required. Wastewater treatment approval from either the Department or the State Department of Health must be obtained prior to the issuance of a § 401 Certification.

The minimum requirements for wastewater treatment approvals shall include, but are not limited to, the following:

- (a) no effluent, treated or untreated, shall be discharged directly into the canal,
- (b) depending on the soil type, a minimum of 150 feet from a septic tank absorption field to any water body shall be required,

- (c) the bottom of a septic tank absorption field shall be at least five feet above the impervious layer or groundwater, and
- (d) the bottom of a septic tank absorption field shall be above the 10-year flood plain.

III. Storm Water Management

Storm water runoff from any project site shall be directed away from the canals to prevent discharge of water-borne contaminants, bacteria, nutrients, oils, greases, sediments, etc.

EXHIBIT B to Chapter 1, Subchapter 3
FRESHWATER AND COASTAL MARINA GUIDELINES

I. Siting Criteria

- A. Marinas shall be located in areas that eliminate or minimize the loss of wetland vegetation.
- B. Marinas shall not be sited in open shellfish harvesting waters.
- C. Marina design shall not disrupt normal water circulation patterns or restrict tidal flow in adjacent water bodies.
- D. Marina basins shall provide for water circulation and be designed to accommodate tidal flushing by incorporating flow through breakwaters or similar structures.
- E. Marina basins excavated from uplands shall be designed to optimize tidal flushing and internal circulation.
 - 1. The basin should be rectangular and have a length to width ratio between 0.5 and 2.0.
 - 2. Corners in the basin interior should be rounded.
 - 3. The basin should have a symmetric entrance(s) with maximum width and minimum length.
 - 4. The basin shall not be greater in depth than the entrance channel which shall be no deeper than the controlling navigational depth.
 - 5. Basin and channel depths shall gradually increase toward open water.

II. Sewage Treatment Guidelines

- A. No persons shall live on boats moored at the marina unless the boats are equipped with a Type III (non-discharging) marine sanitation device (MSD).
- B. A wastewater pumpout facility shall be provided for the following:
 - 1. marinas that are located within one tidal cycle of open shellfish harvesting waters,
 - 2. marinas that berth more than twenty-five (25) boats,
 - 3. marinas that berth any boats used in a live-aboard status,
 - 4. marinas that berth a majority of commercial boats,

5. marinas that are in close proximity to a public water supply intake, or
 6. marinas that are in close proximity to a swimming area.
- C. Marinas utilizing wastewater pumpout facilities shall prominently display a sign at the marina showing the location of the nearest pumpout facility as well as other appropriate waste disposal information.
- D. The pumpout facility shall be tied into a collection and treatment system that has the approval of the Department or State Department of Health.
- E. All marinas shall observe compliance with a "locked head" policy for all docked vessels with Type I and II MSDS and the notification of this policy to marina users shall be initiated upon completion of the project.

III. Storm Water Management

The applicability of these criteria will be determined by the Department on a case-by-case basis. If storm water runoff management is necessary to protect water quality, criteria shall be applied as follows:

- A. Approximately the first half inch (0.5) of storm water runoff from impervious surfaces and boat maintenance areas shall be retained. Runoff shall be routed through grassed swales, wetlands, retention and detention ponds and other systems that decrease run off velocity, increase infiltration and allow suspended solids to settle and remove pollutants in the water column.
- B. Surface runoff from the construction, operation and/or maintenance of any service facility associated with the marina, especially boat maintenance areas, shall not discharge directly into water bodies with limited flushing and pollutant assimilation potential (i.e., marina basin, entrance channels). When storm water outfalls are necessary, they shall be located to discharge into areas with high flushing rates.
- C. Porous surfaces such as crushed stone or shell shall be used wherever possible (particularly in parking areas).
- D. Clearing shall be minimized and vegetated buffers such as marsh or natural vegetation shall be created and/or retained on the site between land disturbance activities and water areas.
- E. Erosion and sediment controls shall be installed prior to commencement of upland construction.

IV. Fueling Facilities

A. Fuel storage tanks shall be located onshore above ground unless the tanks meet the federal requirements for underground storage tanks in 40 C.F.R. 280.

B. Containment dikes shall be constructed around above ground storage tanks. The diked area shall be able to contain:

1. the volume of the tank plus a ten-year, 24-hour rainfall event, or
2. 150% of the volume of the tank.

EXHIBIT C to Chapter 1, Subchapter 3
SAND AND GRAVEL BAR MINING IN-THE-DRY

1. The only vehicles/equipment on the sandbar shall be loading equipment and off-road hauling equipment. All highway vehicles shall remain on the access road.
2. The stream banks shall remain sloped and intact. Any disturbance shall be repaired.
3. Vegetation on the stream bank shall remain undisturbed except for a minimum area (normally less than 20 feet in width) necessary for ingress and egress to the site.
4. The stream bottom shall remain intact.
5. The mining activity shall be conducted in the dry. A natural undisturbed area of at least 15 feet in width shall be left between the mining activity and the stream flow. No equipment shall be allowed to operate in the undisturbed area.
6. Measures shall be taken to prevent erosion and sedimentation.
7. In no event shall a sand bar adjacent to a previously mined sand bar be mined until the previously mined sand bar has substantially replenished to pre-mining conditions. Additionally, sand bars less than one river mile apart shall not be mined concurrently.
8. No mining activity shall be conducted at sharply angled bendways (90° or more change in direction) unless the applicant has demonstrated to the Department that there is no significant potential of bisecting the point bar and altering the existing flow pattern.
9. No mining activity shall be conducted on mid-channel sand bars.
10. Vegetation and debris disturbed during the mining activity shall be removed to an upland location and placed in such a manner as to prevent re-entry into the stream.
11. Mined material shall not be stored or stockpiled within the banks of the stream, except for a limited quantity for daily operation.
12. No rubbish, trash, oil, lubricating material, or other pollutants shall be stored within the banks of the stream or be placed in a location where they are likely to cause pollution of any waters of the State.
13. When work is completed in an area, normal physical characteristics of the work area shall be restored, to the extent practicable, without causing additional disturbance. The site shall be graded to smooth contours while maintaining the integrity of the undisturbed areas and the stream bank.

14. The Department may require additional conditions and limitations necessary to protect water quality.

EXHIBIT D to Chapter 1, Subchapter 3 - STORM WATER RUNOFF PLAN

1. Appropriate installation of erosion and sediment controls shall be required during the construction phase.
2. Approximately the first half inch (0.5) of storm water runoff from impervious surfaces (ex. parking lots) shall be temporarily ponded on site and treated through infiltration, settling and evapotranspiration.
3. Grassed/sanded areas and grassed waterways shall be incorporated into the drainage / landscape design to provide maximum opportunity for infiltration and filtration of storm water runoff.
4. Buffer zones shall be maintained on the project perimeter where possible to provide treatment of overland flow before leaving site (minimum 15 feet).
5. The Department may include additional requirements necessary to protect water quality.

EXHIBIT E to Chapter 1, Subchapter 3 - CRITERIA FOR CERTAIN EXISTING COASTAL SUBDIVISIONS ORIGINALLY PLATTED IN LANDS WHICH, BECAUSE OF THE PASSAGE OF THE FEDERAL ACT AND RELATED LAWS AND/OR REGULATIONS, ARE PRESENTLY UNSUITABLE FOR DEVELOPMENT

1. House fill shall be limited to one foot beyond the "drip line" around the house or 1,500 square feet, whichever is smaller.
2. Driveway fill shall not exceed 500 square feet. If surface drainage will be impaired, appropriate culverts must be provided.
3. Bulkheads, if allowed, shall be constructed no further water-ward than mean high tide.
4. State Department of Health approval shall be required on all individual home disposal systems.
5. Fill material must be confined / stabilized to prevent intrusion into adjoining waters.
6. The lot must be directly accessible by an existing improved road or street along which at least one dwelling has been constructed.

Part 6, Chapter 2: Mississippi Commission on Environmental Quality Regulations for Water Quality Criteria For Intrastate, Interstate, And Coastal Waters

TABLE OF CONTENTS

Rule 2.1 General Conditions

Rule 2.2 Minimum Condition Applicable to All Waters

Rule 2.3 Specific Water Quality Criteria

Rule 2.4 Designated Uses In State Waters

Rule 2.1 General Conditions:

A. Antidegradation: The policy inherent in the standards shall be to protect water quality existing at the time these water quality standards were adopted and to upgrade or enhance water quality within the State of Mississippi. Waters whose existing quality is better than the established standards will be maintained at high quality unless the Commission finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In no event, however, may degradation of water quality interfere with or become injurious to existing instream water uses. Further, in no case will water quality be degraded below (or above) the base levels set forth in these standards for the protection of the beneficial uses described herein. In addition, the State will assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control. Where the Commission determines that high quality waters constitute an outstanding National resource, such as waters of National State Parks, Wildlife Refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected. For the purposes of this rule, existing uses are defined as those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the Water Quality Criteria.

B. Sampling and Assessment: The limiting values of water quality herein described shall be measured by the Commission in waters under consideration as determined by good environmental engineering and scientific practice and after consultation with affected parties. Samples shall be taken from points so distributed over the seasons of the year, time of day, and area and depth of the waters being studied as to permit a realistic assessment of water quality. All sampling must be conducted in accordance with the MDEQ-approved Quality Management Plan (QMP), Quality Assurance Project Plan (QAPP), or its equivalent.

Samples shall be analyzed in accordance with methodology specified in 40 CFR 136 and with the latest edition of *Standard Methods for the Examination of Water and Wastewater* or other methods acceptable to the Commission.

C. Designated Use Attainability: Certain waters of the State may not fall within desired or prescribed limitations as outlined. In such instances the Commission may authorize exceptions to these limits, under the following conditions:

- (1) the designated use is not attainable because of natural background conditions; or
- (2) the designated use is not attainable because of irretrievable man-induced conditions; or
- (3) the application of effluent limitations for existing point sources is more stringent than those required pursuant to Section 301(b)(2)(A) and (B) of the Federal Water Pollution Control Act of 1972, as amended, in order to attain the designated use, would result in substantial and widespread adverse economic and social impact.

In no case shall it be permissible to deposit or introduce materials into waters of the State that will cause impairment of the reasonable or legitimate use of said waters.

D. Natural Conditions: Natural conditions are defined as background water quality conditions due only to non-anthropogenic sources. The criteria herein apply specifically with regard to substances attributed to sources (discharges, nonpoint sources, or instream activities) as opposed to natural phenomena. Waters may naturally have characteristics outside the limits established by these criteria. Therefore, naturally occurring conditions that fail to meet criteria should not be interpreted as violations of these criteria.

E. Criteria: In view of the fact that industry is continuing to produce new materials whose characteristics and effects are unknown at this time or for which incomplete national criteria have been established, for the purposes of setting water quality standards or permit limits on a case-by-case basis, such materials shall be evaluated on their merits as information becomes available to the Commission. Sources of information shall include, but not be limited to, the latest edition of *Quality Criteria for Water*, prepared by the Environmental Protection Agency pursuant to Section 304(a) of the Federal Clean Water Act.

F. Applicable Flow: All criteria contained herein shall apply to all stages of stream flow greater than or equal to the 7-day, 10-year minimum flow (7Q10) in unregulated, natural streams, and the legally guaranteed minimum flow in regulated streams, unless otherwise provided in these regulations. This requirement shall not be interpreted to permit any unusual waste discharges during periods of lower flow. Notwithstanding the above, a stream flow equal to the 7-day, 2-year minimum flow (7Q2) in unregulated natural streams shall be utilized in establishing permit limitations for storm water permits. In cases in which either (1) the data are indefinite or inconclusive, or (2) the 7-day, 2-year minimum flow and/or the 7-day, 10-year minimum flow are inappropriate because of the hydrology of the area, other appropriate State and federal agencies will be consulted in establishing the applicable stream flow.

G. Mississippi River: The Mississippi River is classified for Fish and Wildlife, but with the following additions to the criteria stated herein:

Mineral Constituents: Not to exceed the following concentrations at any time:
From Mississippi-Tennessee border to Vicksburg

Chlorides	60 mg/l
Sulfates	150 mg/l
TDS	425 mg/l

From Vicksburg south to the Mississippi-Louisiana border

Chlorides	75 mg/l
Sulfates	120 mg/l
TDS	400 mg/l

H. Mixing Zones: It is recognized that limited areas of mixing are sometimes unavoidable; however, mixing zones shall not be used as a substitute for waste treatment. Mixing zones constitute an area whereby physical mixing of a wastewater effluent with a receiving water body occurs. Application of mixing zones shall be made on a case-by-case basis and shall only occur in cases involving large surface water bodies in which a long distance or large area is required for the wastewater to completely mix with the receiving water body.

The location of a mixing zone shall not significantly alter the designated uses of the receiving water outside its established boundary. Adequate zones of passage for the migration and free movement of fish and other aquatic biota shall be maintained. Toxicity and human health concerns within the mixing zone shall be addressed as specified in the *Environmental Protection Agency Technical Support Document* for Water Quality-Based Toxics Control (EPA-505/2-90-001, March 1991) and amendments thereof. Under no circumstances shall mixing zones overlap or cover tributaries, nursery locations, locations of threatened or endangered species, or other ecologically sensitive areas.

I. Coastal Recreational Waters: Coastal Recreational Waters are marine and estuarine waters that are suitable for recreational purposes, including such water contact activities as swimming, wading, and water skiing. Coastal recreational waters do not include inland waters upstream of the mouth of a river or a stream having a natural connection to the open sea. Water quality monitoring for bacteria content is conducted on these waters to protect the health of bathers. Water contact is discouraged on Mississippi's public access bathing beaches along the shoreline of Jackson, Harrison, and Hancock Counties when enterococci exceed 104 colonies per 100 ml and in all other coastal recreational waters when enterococci exceed 501 colonies per 100 ml. When enterococci counts exceed 104 per 100 ml at the public access beaches, water contact advisories are issued by Mississippi's Beach Monitoring Task Force.

J. Definitions:

- (1) Acute criterion or Criteria Maximum Concentration (CMC) is the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) without deleterious effects. (40 CFR 131.36)
- (2) Best management practice (BMP) means a structural or nonstructural management-based practice used singularly or in combination to reduce nonpoint source inputs to receiving waters in order to achieve water quality protection goals.
- (3) Bioconcentration Factor (BCF) is defined as the ratio (in L/kg-tissue) of the concentration of a substance in tissue of an aquatic organism to its concentration in the ambient water, in situations where the organism is exposed through the water only and the ratio does not change substantially over time. (EPA-822-B-00-004)
- (4) Biological integrity is defined as the ability of a system to support and maintain a balanced, integrated, and adaptive community of organisms having a composition, diversity, and functional organization comparable to that of natural habitats of the region.
- (5) Cancer Potency Factor (CPF) is a measure of the cancer-causing potency of a substance estimated by the upper 95 percent confidence limit of the slope of a straight line calculated by the Linearized Multistage Model according to the U.S. Environmental Protection Agency Guidelines (FR 51(185): 339992-34003, and FR 45(231 Part V); 79318-79379).
- (6) Chronic Criterion or Criteria Continuous Concentration (CCC) is the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. (40 CFR 131.36)
- (7) Clean techniques refers to an integrated system of sample collection and laboratory analytical procedures designed to detect concentrations of trace metals below criteria levels and eliminate or minimize inadvertent sample contamination that can occur during traditional sampling practices.
- (8) Composite sampling is a technique whereby multiple temporally or spatially discrete media or tissue samples are combined, thoroughly homogenized, and treated as a single sample.
- (9) Grab samples are samples where the entire sample is collected in one uninterrupted interval.
- (10) Mean Annual Flow is the total of daily mean flows for the full period of record divided by the total days for the full period of record.

- (11) Membrane Filtration (MF) is a method of quantitative or qualitative analysis of bacterial or particulate matter in a water sample filtered through a membrane capable of retaining bacteria.
- (12) Most probable number (MPN) is the most probable number of coliform-group organisms per unit volume of sample water.
- (13) Point source is a stationary location or fixed facility from which pollutants are discharged or emitted. Also, any single identifiable source of pollution, e.g., a pipe, ditch, or ship.
- (14) 7Q10 is the average streamflow rate over seven consecutive days that may be expected to be reached as an annual minimum no more frequently than one year in ten years.
- (15) 7Q2 is the average streamflow rate over seven consecutive days that may be expected to be reached as an annual minimum no more frequently than one year in two years.
- (16) Stratification is the formation of layers of water within a water body that are of different densities. The density difference may be caused by variations of temperature, salinity, or concentrations of other dissolved substances within the water at different depths.
- (17) Threshold odor number is the number of times a sample needs to be diluted with clean water in order to reach the level that smell is not detectable.
- (18) Toxic substance means any substance or combination of substances (including disease-causing agents), which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, whether directly from the environment or indirectly by ingestion through food chains, has the potential to cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions or suppression in reproduction or growth) or physical deformities in such organisms or their offspring.

Source: Miss. Code Ann. §§ 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 2.2 Minimum Conditions Applicable to All Waters:

A. Narrative Standards

- (1) Waters shall be free from substances attributable to municipal, industrial, agricultural, or other discharges that will settle to form putrescent or otherwise objectionable sludge deposits.

- (2) Waters shall be free from floating debris, oil, scum, and other floating materials attributable to municipal, industrial, agricultural, or other discharges in amounts sufficient to be unsightly or deleterious.
- (3) Waters shall be free from materials attributable to municipal, industrial, agricultural, or other discharges producing color, odor, taste, total suspended or dissolved solids, sediment, turbidity, or other conditions in such degree as to create a nuisance, render the waters injurious to public health, recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated use. Except as prohibited in Rule 2.1.H. above, the turbidity outside the limits of a 750-foot mixing zone shall not exceed the background turbidity at the time of discharge by more than 50 Nephelometric Turbidity Units (NTU). Exemptions to the turbidity standard may be granted under the following circumstances:
 - (a) in cases of emergency to protect the public health and welfare
 - (b) for environmental restoration projects which will result in reasonable and temporary deviations and which have been reviewed and approved by the Department of Environmental Quality.
- (4) Waters shall be free from substances attributable to municipal, industrial, agricultural, or other discharges in concentrations or combinations that are toxic or harmful to humans, animals, or aquatic life. Specific requirements for toxicity are found in Rule 2.2.F.
- (5) Municipal wastes, industrial wastes, or other wastes shall receive effective treatment or control in accordance with Section 301, 306, and 307 of the Federal Clean Water Act. A degree of treatment greater than defined in these sections may be required when necessary to protect legitimate water uses.

B. Water Body Classifications and Designated Uses: The State of Mississippi water body classifications and corresponding U.S. EPA associated designated uses for water quality assessment purposes recognized by the State of Mississippi are as follows:

Table 1. Mississippi Water Body Classifications and Designated Uses

MS Water Body Classification	U.S. EPA Associated Designated Use
Public Water Supply	Drinking Water Supply
Recreation	Primary Contact Recreation
Shellfish Harvesting	Shellfish Consumption

Fish and Wildlife	Aquatic Life Use Fish Consumption Secondary Contact Recreation
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A water body classified as Public Water Supply, Recreation, or Shellfish Harvesting shall meet not only the criteria to support its respective classification, but also shall meet the criteria to support the Fish and Wildlife classification.

C. Dissolved Oxygen: Dissolved oxygen concentrations shall be maintained at a daily average of not less than 5.0 mg/l with an instantaneous minimum of not less than 4.0 mg/l.

When possible, samples should be taken from ambient sites according to the following guidelines:

For waters bodies that are not stratified, samples should be taken:

At mid-depth if the total water column depth is 10 feet or less.

At 5 feet from the water surface if the total water column depth is greater than 10 feet.

For waters that are stratified, samples should be taken:

At mid-depth of the epilimnion if the epilimnion depth is 10 feet or less.

At 5 feet from the water surface if the epilimnion depth is greater than 10 feet.

D. pH: The normal pH of the waters shall be 6.0 to 9.0 and shall not be caused to vary more than 1.0 unit within this range. Variations may be allowed on a case-by-case basis if the Commission determines that there will be no detrimental effect on the water body's designated uses as a result of the greater pH change. In black water streams and in those watersheds with highly acidic soils, the pH may be lower than 6.0 due to natural conditions.

E. Temperature: The maximum water temperature increase above natural temperatures shall not exceed 5°F (2.8°C) in streams, lakes, and reservoirs nor shall the maximum water temperature exceed 90°F (32.2°C), except that in the Tennessee River the temperature shall not exceed 86°F (30°C). In lakes and reservoirs, there shall be no withdrawals from or discharge of heated waters to the hypolimnion unless it can be shown that such discharge will be beneficial to water quality.

In all waters the normal daily and seasonal temperature variations that were present before the addition of artificial heat shall be maintained. The maximum water temperature shall not exceed 90°F (32.2°C) in coastal or estuarine waters. The discharge of any heated waste into any coastal or estuarine waters shall not raise temperatures more than 4°F (2.2°C) above natural background temperatures during the months of October through May nor more than 1.5°F (0.8°C) above natural background temperature during the months of June through September.

There shall be no thermal block to the migration of aquatic organisms. Requirements for zones of passage as referenced in Rule 2.1.H. shall apply. The general requirements of Rule 2.1.B. state that samples should be taken from points so distributed over the seasons of the year, time of day, and area and depth of the waters being studied as to permit a realistic assessment of water quality. Therefore, the temperature shall be measured during the environmentally critical period. In addition, temperature shall be measured at a depth of 5 feet in waters 10 feet or greater in depth; and for those waters less than 10 feet in depth, temperature criteria will be applied at mid-depth.

In those specific cases where natural conditions elevate the temperatures in excess of the limits expressed herein, Rule 2.2.E. shall apply on a case-by-case basis. The discharge of any heated waters into a stream, lake, or reservoir shall not raise temperatures more than 5°F (2.8°C) above natural condition temperatures. The discharge of any heated waste into any coastal or estuarine waters shall not raise temperatures more than 4°F (2.2°C) above natural condition temperatures during the months of October through May nor more than 1.5°F (0.8°C) above natural condition temperatures during the months of June through September. This will also be considered on a case-by-case basis requiring evidence that the aquatic life of the water body will not be adversely impacted by the elevated temperatures.

F. Toxic Substances:

(1) Aquatic Life and Human Health Standards

- (a) Aquatic Life - The concentration of toxic substances in State waters shall not result in chronic or acute toxicity or impairment of the uses of aquatic life. Toxicity concentrations in State waters in excess of these values shown in Table 2 will be assessed to determine chronic or acute toxicity, and/or the impairment of the uses of aquatic life. Chronic and/or acute toxicity will be determined in accordance with the *Water Quality Standards Handbook: Second Edition* (EPA-823-B-94-005a, August 1994) and *Technical Support Document for Water Quality-Based Toxics Control* (EPA-505/2-90-001, March 1991). Regardless of the results of chronic or acute toxicity bioassay surveys, the concentrations of toxic substances shall not exceed the chronic or acute values, except as provided for in Rules 2.2.F.5(a) and 2.2.F.5(b).
- (b) Human Health - The concentration of toxic substances shall not exceed the level necessary to protect human health through exposure routes of fish (and shellfish) tissue consumption, water consumption, or other routes identified as appropriate for the water body.

- (2) Numeric criteria for all waters are established herein for certain toxic pollutants for which the Environmental Protection Agency (EPA) has published national criteria for the protection of aquatic life and human health pursuant to Section

304(a) of the Federal Clean Water Act in addition to chlorine and ammonia. The pollutants are listed in Table 2 and are expressed as the dissolved phase of the parameter.

- (3) Ammonia toxicity shall be evaluated according to EPA guidelines published in *1999 Update of Ambient Water Quality Criteria for Ammonia*; EPA document number EPA-822-R-99-014 or *Ambient Water Quality Criteria for Ammonia (Saltwater)* - 1989; EPA document number 440/5-88-004. This material related to ammonia toxicity is hereby incorporated by reference including any subsequent amendments and editions.

- (4) Application of Numerical Criteria:

- (a) When evaluating human health effects all waters must comply with the Organisms Only criteria except for waters classified as Public Water Supply and all stream segments within 50 stream miles upstream of a drinking water intake. Stream segments that are classified as Public Water Supply or are within 50 miles upstream of a drinking water intake shall comply with the Water and Organisms criteria.
- (b) When applying acute or chronic toxicity or human health criteria the following stream flows shall be used:

Acute Toxicity - 7Q10
Chronic Toxicity - 7Q10
Human Health - Mean Annual Flow

- (c) Criteria for certain metals may be modified on a site-specific basis when a water effect ratio (WER) is conducted in accordance with Rule 2.6.C.2.a. of Mississippi's *Wastewater Regulations for National Pollutant Discharge Elimination System (NPDES) Permits, Underground Injection Control (UIC) Permits, State Permits, Water Quality Based Effluent Limitations and Water Quality Certification*, Title 11, Part 6, Chapter 1. In these instances, the criterion for the specific metal in the affected water body shall be equal to the criterion concentrations calculated using the following equations:

$$\text{CMC} = \text{WER} * \text{Acute and CCC} = \text{WER} * \text{Chronic}$$

Where: CC = Criteria Continuous Concentration
CMC = Criteria Maximum Concentration
WER = Water Effects Ratio for a Specific Pollutant
Acute = Acute Criterion from Table 2
Chronic = Chronic Criterion from Table 2

When a WER has not been conducted, the criterion listed in Table 2 of this regulation shall apply because the value of the WER is presumed to equal one in the absence of data to indicate otherwise.

(5) Discharge Specific Criteria:

(a) Existing Discharges

- (1) The Commission may establish discharger specific alternative criteria for existing discharges if all of the following conditions are satisfied:
 - (i) Discharge existed prior to December 1, 1988.
 - (ii) Discharger performs acute and/or chronic bioassays and instream biological assessments and other evaluations as deemed appropriate by the Commission.
 - (iii) The designated use of the waters is maintained.
- (2) All discharger specific alternative criteria will be subject to Mississippi public participation requirements for revisions to water quality standards and will be subject to review by the U. S. Environmental Protection Agency.

(b) New Source Discharges

- (1) The Commission may establish discharger specific criteria for new source discharges if the discharger can demonstrate that established Water Quality Criteria are based on conditions not applicable to Mississippi such as, but not limited to, the use of species not indigenous to Mississippi.
- (2) All discharger specific alternative criteria will be subject to Mississippi public participation requirements for revisions to water quality standards and will be subject to review by the U. S. Environmental Protection Agency.

(6) Toxic and Human Health Parameters for which no Numeric Criteria have been Established:

- (a) For those toxic and human health parameters for which no numeric criteria have been established, the Commission shall determine limitations using available references which shall include, but not be limited to, *Quality Criteria for Water* (Section 304(a)), Federal regulations under Section 307

of the Clean Water Act, and Federal regulations under Section 1412 of the Public Health Service Act as amended by the Safe Drinking Act (Pub. 93-523).

- (b) The not to be exceeded value for criteria published in 1980 or the one hour average value for criteria published in 1985 or later shall be used as an acute toxicity number for calculating effluent limitations, establishing Total Maximum Daily Loads (TMDLs), or reviewing ambient water quality data.
- (c) The 24-hour average for criteria published in 1980 or the 4-day average for criteria published in 1985 or later shall be used as a chronic toxicity number for calculating effluent limitations, establishing TMDLs, or reviewing ambient water quality data.
- (d) If metals concentrations for criteria are hardness-dependent, the chronic and acute concentrations shall be based on 25 mg/l hardness if the ambient hardness is less than or equal to 25 mg/l. Concentrations shall be based on the actual mixed stream hardness.
- (e) If separate criteria are given for fresh and salt waters, they shall be applied as appropriate.
- (f) For non-carcinogens, these concentrations will be determined using a Reference Dose (RfD) as published by the U. S. Environmental Protection Agency pursuant to Section 304(a) of the Federal Water Pollution Act as amended unless a more recent RfD is issued by the U. S. Environmental Protection Agency as listed in the Integrated Risk Information System (IRIS) file, in which case the more recent value will be used. Water quality standards or criteria used to calculate water quality-based effluent limitations (and for all other purposes of water quality criteria under Section 303(c) of the Clean Water Act) to protect human health through the different exposure routes are determined as follows:

- (1) Fish tissue consumption:

$$WQC = (RfD) \times \text{Body Weight} / (FCR \times BCF)$$

where: WQC = water quality criterion

RfD = reference dose

FCR = fish consumption rate (17.5 gm/person-day)

BCF = bioconcentration factor

BCF values are based on U. S. Environmental Protection Agency publications pursuant to Section 304(a) of the Clean Water Act.

FCR values are average consumption rates for a 70 kg adult for a

lifetime of the population; alternative FCR values may be used when it is considered necessary to protect localized populations which may be consuming fish at a higher rate.

(2) Water consumption and fish tissue consumption:

$$WQC = (RfD) \times \text{Body Weight} / (WCR + (FCR \times BCF))$$

where: WQC = water quality criterion
RfD = reference dose
FCR = fish consumption rate (17.5 gm/person-day)
BCF = bioconcentration factor
WCR = water consumption rate (assumed to be 2liters/day for adults)

The equations listed in this subparagraph will be used to develop water criteria or standards on a case-by-case basis for toxic substances that are not presently included in the water quality standards. Alternative FCR values may be used when it is considered necessary to protect localized populations that may be consuming fish at a higher rate.

- (g) For carcinogens, the concentrations of toxic substances will not result in unacceptable health risk and will be based on a Cancer Potency Factor (CPF). An unacceptable health risk for cancer will be considered to be more than one additional case of cancer per one million people exposed (10-6 risk level). Water quality standards or criteria used to calculate water quality-based effluent limitations (and for all other purposes of water quality criteria under Section 303(c) of the Clean Water Act) to protect human health through the different exposure routes are determined as follows:

(1) Fish tissue consumption:

$$WQC = (\text{Risk}) \times \text{Body Weight} / (\text{CPF} \times (\text{FCR} \times \text{BCF}))$$

where: WQC = water quality criterion
Risk = risk factor (10)
CPF = cancer potency factor
FCR = fish consumption rate (17.5 gm/person-day)
BCF = bioconcentration factor

BCF values are based on U.S. Environmental Protection Agency publications pursuant to Section 304(a) of the Clean Water Act. FCR values are average consumption

rates for a 70 kg adult for a lifetime of the population; alternative FCR values may be used when it is considered necessary to protect localized populations which may be consuming fish at a higher rate.

(2) Water consumption (including a correction for fish consumption):

$$\text{WQC} = \text{Risk} \times \text{Body Weight} / (\text{CPF} \times (\text{WCR} + (\text{FCR} \times \text{BCF})))$$

where: WQC = water quality criterion

Risk = risk factor (10)

CPF = cancer potency factor

FCR = fish consumption rate (17.5 gm/person-day)

BCF = bioconcentration factor

WCR = water consumption rate (assumed to be 2 liters/day for adults)

The equations listed in this subparagraph will be used to develop water criteria or standards on a case-by-case basis for toxic substances that are not presently included in the water quality standards. Alternative FCR values may be used when it is considered necessary to protect localized populations that may be consuming fish at a higher rate.

TABLE 2 Notes

- a** The $CMC = 1/[(f_1/CMC_1) + (f_2/CMC_2)]$ where f_1 and f_2 are the fractions of total selenium that are treated as selenite and selenate, respectively, and CMC_1 and CMC_2 are 185.9 $\mu\text{g/l}$ and 12.83 $\mu\text{g/l}$. The value in the table is calculated assuming a worst case scenario in which all selenium is present as selenate.
- b** Hardness dependent parameter. Criteria are indicated at hardness of 50 mg/l as CaCO_3 . Equations for criteria calculation of hardness dependent parameters can be found in *Quality Criteria for Water*. The equation is applicable for instream hardness ranges from 25 mg/l to 400 mg/l. If instream hardness is less than 25 mg/l, then a hardness value of 25 mg/l should be used to calculate the criteria. If instream hardness is greater than 400 mg/l, then a hardness of 400 mg/l should be used to calculate the criteria.
- c** Criteria for pentachlorophenol are based on a pH dependent equation as found in *Quality Criteria for Water*. Values listed are for a pH of 7.0 s.u.
- d** Site specific criteria for Mississippi Sound.
- e** Parameter subject to water effects ratio equations where:
 $CMC = WER * \text{Acute}$
 $CCC = WER * \text{Chronic}$
- f** Ammonia criteria are dependent on pH, temperature, and/or salinity. See Section II.10.C.
- g** Expressed as μg free cyanide (as CN)/L.
- h** Refers to the inorganic form only.
- i** Applies to the sum of α and β isomers.
- j** Chemical Abstracts Service (CAS) registry numbers, which provide a unique identification for each chemical.
- k** This criterion applies to total PCBs (e.g., the sum of all congener or all isomer or homolog or Aroclor analyses).

TABLE 2
Numeric Criteria for All Waters (µg/l)

CAS j	Parameter	Fresh Water		Salt Water		Human Health	
		Acute	Chronic	Acute	Chronic	Organisms Only	Water & Organisms
309002	Aldrin	3.0		1.3		0.000050	0.000049
7664417	Ammonia	f	f	f	f		
7440382	Arsenic (III), Total Dissolved	340 ^e	150 ^e	69	36		
7440382	Arsenic, Total Dissolved					24 ^h	0.078 ^h
7440439	Cadmium, Total Dissolved	1.03 ^{b,e}	0.15 ^{b,e}	40	8.8	168	5
57749	Chlordane	2.4	0.0043	0.09	0.004	0.00081	0.00080
7782505	Chlorine	19	11	13	7.5		
18540299	Chromium (Hex), Total Dissolved	16 ^e	11 ^e	1100	50	1470	98
16065831	Chromium (III), Total Dissolved	323 ^{b,e}	42 ^{b,e}			140468	100
7440508	Copper, Total Dissolved	7.0 ^{b,e}	5.0 ^{b,e}	4.8	3.1	1000	1300
57125	Cyanide	22.0 ^g	5.2 ^g	1.0 ^g	1.0 ^g	140	140
50293	4,4 DDT	1.1	0.001	0.13	0.001	0.00022	0.00022
60571	Dieldrin	0.24	0.056	0.71	0.0019	0.000054	0.000052
1746016	2,3,7,8 TCDD (Dioxin)					51 x 10 ⁻⁹	50 x 10 ⁻⁹
959988	alpha-Endosulfan	0.22 ¹	0.056 ¹	0.034 ¹	0.0087 ¹	89	62 ^j
33213659	beta-Endosulfan	0.22 ¹	0.056 ¹	0.034 ¹	0.0087 ¹	89 ^j	62
1031078	Endosulfan Sulfate					89 ^j	62 ^j
72208	Endrin	0.086	0.036	0.037	0.0023	0.060	0.059
76448	Heptachlor	0.52	0.0038	0.053	0.0036	0.000079	00.00079

58899	gamma-BHC (Lindane)	0.95	0.08	0.16		1.8	0.98
7439921	Lead, Total Dissolved	30 ^{b,e}	1.18 ^{b,e}	210	8.1		15
7439976	Mercury (II), Total Dissolved	2.1e	0.012	1.8	0.025		
7439976	Mercury					0.153	0.151
7440020	Nickel, Total Dissolved	260 ^{b,e}	29 ^{b,e}	75	8.3	4600	610
108952	Phenol	300	102	300	58	860000	10000
87865	Pentachlorophenol	8.7 ^c	6.7 ^c	13 ^c	7.9 ^c	3.0	0.27
	Total PCB	0.02 ^k	0.014 ^k	1.0 ^k	0.03 ^k	0.000064 ^k	0.000064 ^k
7782492	Selenium, Total Dissolved	11.8 ^{a,e}	4.6 ^e	290 ^e	71 ^e	4200	170
7440224	Silver, Total Dissolved	0.98 ^{b,f}		1.9			100
8001352	Toxaphene	0.73	0.0002	0.21	0.0002	0.00028	0.00028
7440666	Zinc, Total Dissolved	65 ^{b,e}	65 ^{b,e}	90	81	26,000	7,400

Source: Miss. Code Ann. §§ 49-2-9, 49-2-1, *et seq.*, and 49-17-1, *et seq.*

Rule 2.3 Specific Water Quality Criteria:

A. PUBLIC WATER SUPPLY CLASSIFICATION:

Waters in this classification are a source of raw water supply for drinking and food processing purposes. The water treatment process shall be approved by the Mississippi State Department of Health. The raw water supply shall be such that after the approved treatment process, it will satisfy the regulations established pursuant to Section 1412 of the Public Health Service Act as amended by the Safe Drinking Water Act (Pub. L. 93-523). Information regarding surface water intakes for Public Water Supply is provided in Table 3.

Table 3. Mississippi Surface Water Intakes for Public Water Supply

Water Body	Name	Location	Status
Bonita Reservoir	City of Meridian	Lauderdale County	Inactive
Long Creek Reservoir	City of Meridian	Lauderdale County	Inactive
Luxapallila Creek	Columbus Light and Water	Lowndes County	Inactive
Okatibbee Reservoir	Pat Harrison Waterway District	Lauderdale County	Inactive
Pascagoula River	Jackson County Port Authority	Jackson County	Active
Pickwick Lake (Yellow Creek Embayment)	Short Coleman Park Water Association	Tishomingo County	Inactive
Ross Barnett Reservoir Pearl River	City of Jackson	Hinds County	Active
Tenn-Tom Waterway	City of Corinth Gas and Water Department	Tishomingo County	Under Construction
Tombigbee River	NE MS Regional Water Supply District	Itawamba County	Active

Waters that meet the Public Water Supply criteria shall also be suitable for secondary contact recreation. Secondary contact recreation is defined as incidental contact with the water during activities such as wading, fishing, and boating, that are not likely to result in full body immersion. In considering the acceptability of a proposed site for disposal of bacteria latent wastewater in or near waters with the public water supply classification, the Permit Board shall consider the relative proximity of the discharge to water supply intakes.

- (1) Bacteria: For the months of May through October, when water contact recreation activities may be expected to occur, fecal coliform shall not exceed a geometric mean of 200 per 100 ml based on a minimum of 5 samples taken over a 30-day period with no less than 12 hours between individual samples, nor shall the

samples examined during a 30-day period exceed 400 per 100 ml more than 10% of the time.

For the months of November through April, when incidental recreational contact is not likely, fecal coliform shall not exceed 2000 per 100 ml as a geometric mean (either MPN or MF count) based on at least 5 samples taken over a 30-day period with no less than 12 hours between individual samples, nor shall the samples examined during a 30-day period exceed 4000 per 100 ml more than 10% of the time.

- (2) Chlorides (Cl): There shall be no substances added which will cause the chloride content to exceed 230 mg/l in freshwater streams.
- (3) Specific Conductance: There shall be no substances added to increase the conductivity above 500 micromhos/cm for freshwater streams.
- (4) Dissolved Solids: There shall be no substances added to the waters that will cause the dissolved solids to exceed 500 mg/l for freshwater streams.
- (5) Threshold Odor: There shall be no substances added which will cause the threshold odor number to exceed 24 (at 60°C) as a daily average.
- (6) Radioactive Substances: There shall be no radioactive substances added to the waters which will cause the gross beta activity (in the known absence of Strontium-90 and alpha emitters) to exceed 1000 picocuries per liter at any time.
- (7) Specific Chemical Constituents: In addition to the provisions in Section II.4. and 10., the following concentrations (dissolved) shall not be exceeded at any time:

<u>Constituent</u>	<u>Concentration (mg/l)</u>
Barium	2.0
Fluoride	2.0
Lead	0.015
Nitrate (as N)	10.0

B. SHELLFISH HARVESTING CLASSIFICATION

Waters in this classification are for propagation and harvesting shellfish for sale or use as a food product. These waters shall meet the requirements set forth in the latest edition of the *National Shellfish Sanitation Program, Manual of Operations, Part I, Sanitation of Shellfish Growing Areas*, as published by the U. S. Public Health Service. Waters that meet the Shellfish Harvesting Area Criteria shall also be suitable for recreational purposes. In considering the acceptability of a proposed site for disposal of bacteria latent wastewater in or near waters with this classification, the Permit Board shall consider the relative proximity of the discharge to shellfish harvesting beds.

- (1) Bacteria: The median fecal coliform MPN (Most Probable Number) of the water shall not exceed 14 per 100 ml, and not more than 10% of the samples shall

ordinarily exceed an MPN of 43 per 100 ml in those portions or areas most probably exposed to fecal contamination during most unfavorable hydrographic and pollutive conditions.

C. RECREATION CLASSIFICATION:

Waters in this classification are to be suitable for recreational purposes, including such water contact activities as swimming and water skiing. In considering the acceptability of a proposed site for disposal of bacteria latent wastewater in or near waters with this classification, the Permit Board shall consider the relative proximity of the discharge to areas of actual water contact activity.

- (1) Bacteria: Fecal coliform shall not exceed a geometric mean of 200 per 100 ml based on a minimum of 5 samples taken over a 30-day period with no less than 12 hours between individual samples, nor shall the samples examined during a 30-day period exceed 400 per 100 ml more than 10% of the time. For both marine and estuarine coastal recreational waters, Enterococci shall not exceed a seasonal (May – October and November – April) geometric mean of 35 per 100 ml based on a minimum of 20 samples collected during each season. Coastal recreational waters do not include inland waters upstream of the mouth of a river or a stream having a natural connection to the open sea.
- (2) Specific Conductance: There shall be no substances added to increase the conductivity above 1000 micromhos/cm for freshwater streams.
- (3) Dissolved Solids: There shall be no substances added to the water to cause the dissolved solids to exceed 750 mg/l as a monthly average value, nor exceed 1500 mg/l at any time for freshwater streams.

D. FISH AND WILDLIFE CLASSIFICATION:

Waters in this classification are intended for fishing and for propagation of fish, aquatic life, and wildlife. Waters that meet the Fish and Wildlife Criteria shall also be suitable for secondary contact recreation. Secondary contact recreation is defined as incidental contact with the water during activities such as wading, fishing, and boating, that are not likely to result in full body immersion.

- (1) Bacteria: For the months of May through October, when water contact recreation activities may be expected to occur, fecal coliform shall not exceed a geometric mean of 200 per 100 ml based on a minimum of 5 samples taken over a 30-day period with no less than 12 hours between individual samples, nor shall the samples examined during a 30-day period exceed 400 per 100 ml more than 10% of the time.

For the months of November through April, when incidental recreational contact is not likely, fecal coliform shall not exceed a geometric mean of 2000 per 100 ml based on a minimum of 5 samples taken over a 30-day period with no less than 12

hours between individual samples, nor shall the samples examined during a 30-day period exceed 4000 per 100 ml more than 10% of the time.

- (2) Specific Conductance: There shall be no substances added to increase the conductivity above 1000 micromhos/cm for freshwater streams.
- (3) Dissolved Solids: There shall be no substances added to the waters to cause the dissolved solids to exceed 750 mg/l as a monthly average value, nor exceed 1500 mg/l at any time for freshwater streams.

E. EPHEMERAL STREAM CLASSIFICATION:

Waters in this classification do not support a fisheries resource and are not usable for human consumption or aquatic life. Ephemeral streams normally are natural watercourses, including natural watercourses that have been modified by channelization or a manmade drainage ditch, that without the contribution of point source discharges, flow only in direct response to precipitation or irrigation return-water discharge in the immediate vicinity and whose channels are normally above the groundwater table. Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses. These streams may contain a transient population of aquatic life during the portion of the year when there is suitable habitat for fish survival. Normally, aquatic habitat in these streams is not adequate to support a reproductive cycle for fish and other aquatic life. Wetlands are excluded from this classification.

Waters in this classification shall be protective of wildlife and humans that may come in contact with the waters. Waters contained in ephemeral streams shall also allow maintenance of the standards applicable to all downstream waters.

- (1) Provisions A, B, C, and E of Rule 2.2 (Minimum Conditions Applicable to All Waters: Narrative Standards) are applicable except as they relate to fish and other aquatic life. All aspects of provisions 2.2.A.4) and 2.2.F. concerning toxicity will apply to ephemeral streams, except for domestic or compatible domestic wastewater discharges which will be required to meet toxicity requirements in downstream waters not classified as ephemeral. Alternative methods may be utilized to determine the potential toxic effect of ammonia. Acutely toxic conditions are prohibited under any circumstances in waters in this classification.
- (2) Dissolved Oxygen: The dissolved oxygen shall be maintained at an appropriate level to avoid nuisance conditions.
- (3) Bacteria: The Permit Board may assign bacterial criteria where the probability of a public health hazard or other circumstances so warrant.
- (4) Fisheries resource is defined as any water body which has a viable gamefish population as documented by the Mississippi Department of Wildlife Fisheries and Parks or has sufficient flow or physical characteristics to support the fishing

use during times other than periods of flow after precipitation events or irrigation return water discharge.

- (5) "Not usable for human consumption or aquatic life" means that sufficient flow or physical characteristics are not available to support these uses.
- (6) "Flow only in response to precipitation or irrigation return water" means that without the influence of point source discharges the stream will be dry unless there has been recent rainfall or a discharge of irrigation return water.
- (7) "Protective of wildlife and humans that may come in contact with the waters" means that toxic pollutants shall not be discharged in concentrations that will endanger wildlife or humans.
- (8) "Nuisance conditions" means objectionable odors or aesthetic conditions that may generate complaints from the public.

Recommendations for assignment of the Ephemeral Stream classification shall be made to the Commission on Environmental Quality by the Permit Board after appropriate demonstration of physical and hydrological data. The Ephemeral Stream classification shall not be assigned where environmental circumstances are such that a nuisance or hazardous condition would result or public health is likely to be threatened. Alternate discharge points shall be investigated before the Ephemeral Stream classification is considered.

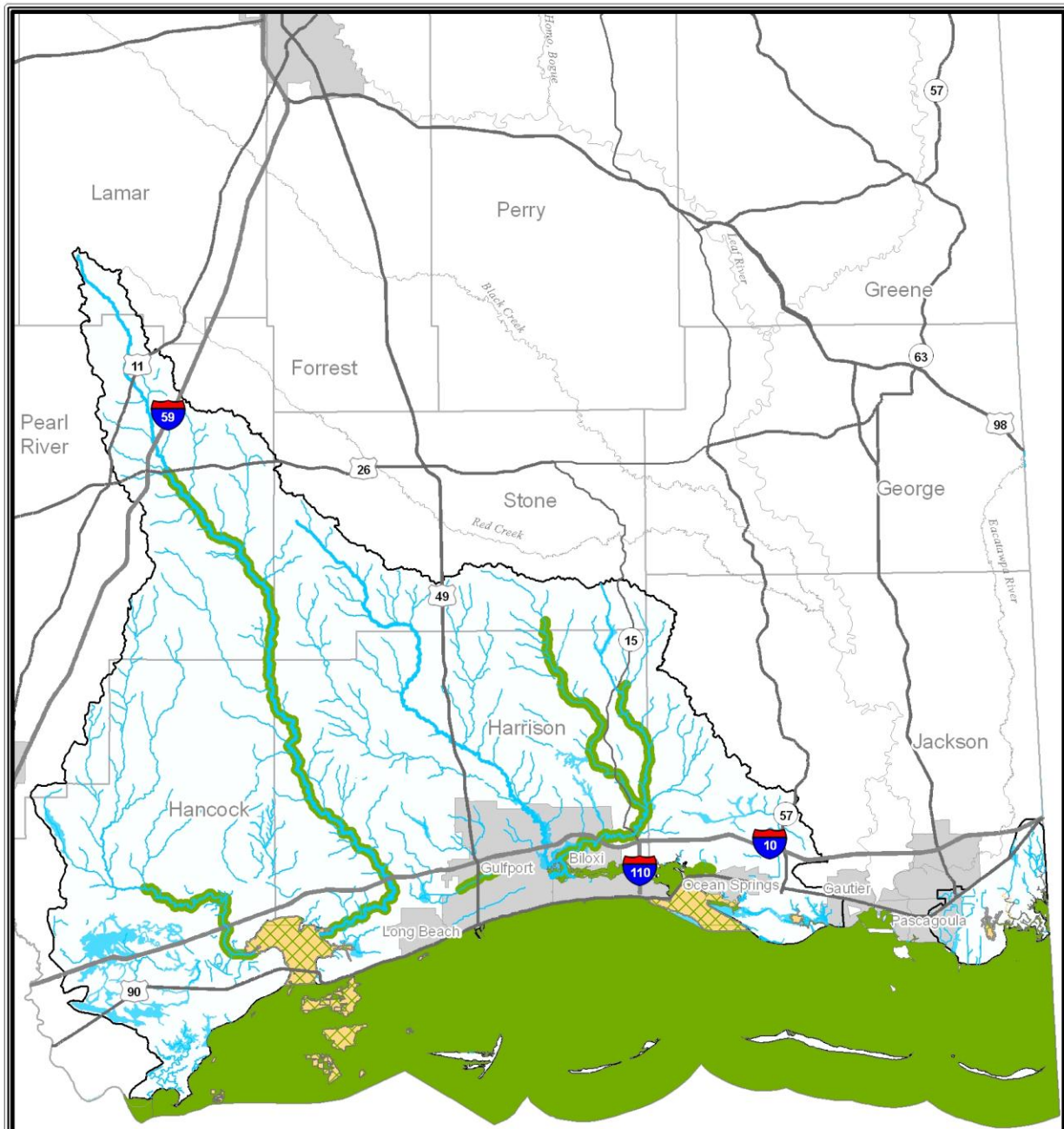
Source: Miss. Code Ann. §§ 49-2-9, 49-2-1, *et seq.*, and 49-17-1, *et seq.*

Rule 2.4 Water Body Classifications in State Waters:

All of the State waters not specifically listed below shall be classified as Fish and Wildlife. State waters carrying other classifications are:

Coastal Streams Basin		
Waters	Location	Classification
Back Bay of Biloxi	From Popp's Ferry Bridge to Biloxi Bay	Recreation
Bangs Lake	From headwaters to the Mississippi Sound	Shellfish Harvesting
Bayou Cumbest	From headwaters to the Mississippi Sound	Shellfish Harvesting
Big Lake	From Bernard Bayou to the Popp's Ferry Bridge	Recreation
Biloxi Bay	From Headwaters (US Hwy 90 Bridge) to the Mississippi Sound	Shellfish Harvesting Recreation
Buoy Beef	Mississippi Sound	Shellfish Harvesting Recreation
Davis Bayou	From headwaters to the Biloxi Bay	Shellfish Harvesting
Graveline Bay	From headwaters to Graveline Bayou	Shellfish Harvesting
Graveline Bayou	From Graveline Bay to the Mississippi Sound	Shellfish Harvesting
Jourdan River	From confluence of Bacon Bayou and Catahoula Creek to the St. Louis Bay	Recreation
Kittiwake Reef (Long Beach Reef)	Mississippi Sound	Shellfish Harvesting Recreation
Mallini Bayou	From St. Louis Bay to St. Louis Bay	Shellfish Harvesting
Mississippi Sound	Contiguous to Mississippi Coastline	Recreation
Old Fort Bayou	From Bayou Talla to Biloxi Bay	Recreation
Pass Christian Reef (off Henderson Point)	Mississippi Sound	Shellfish Harvesting Recreation
Pass Marianne Reef	Mississippi Sound	Shellfish Harvesting Recreation
Pelican Key Reef	Mississippi Sound	Shellfish Harvesting Recreation
Point Clear Shell Plant	Mississippi Sound	Shellfish Harvesting Recreation
St. Joe Reef (St. Joseph's Point Reef)	Mississippi Sound	Shellfish Harvesting Recreation
St. Louis Bay	Harrison and Hancock Counties	Shellfish Harvesting Recreation
Tchoutacabouffa River	From headwaters to the Back Bay of Biloxi	Recreation

Coastal Streams Basin		
Waters	Location	Classification
St. Louis Bay	Harrison and Hancock Counties	Shellfish Harvesting Recreation
St. Stanislaus Reef	Mississippi Sound	Shellfish Harvesting Recreation
Tchoutacabouffa River	From headwaters to the Back Bay of Biloxi	Recreation
Telegraph Reef	Mississippi Sound	Shellfish Harvesting Recreation
Turkey Creek	From Forest Heights Middle School to Bernard Bayou	Recreation
Tuxachanie Creek	From headwaters to the Tchoutacabouffa River	Recreation
Waveland Reef	Mississippi Sound	Shellfish Harvesting Recreation
Wolf River	From MS Hwy 26 to the St. Louis Bay	Recreation

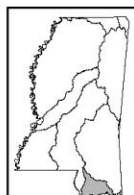


Coastal Streams Basin Water Quality Standards

This map produced by the Department of Environmental Quality (MDEQ), Office of Pollution Control, Surface Water Division, Standards, Modeling, and TMDL Branch on October 30, 2009.

All map data is from the Mississippi Automated Resource Information System (MARIS) and MDEQ.
Map Projection: Mississippi Transverse Mercator

The Mississippi Department of Environmental Quality makes no warranties, expressed or implied, as to the accuracy, completeness, currentness, reliability, or suitability for any particular purpose, of the data contained on this map.



Mississippi Basins

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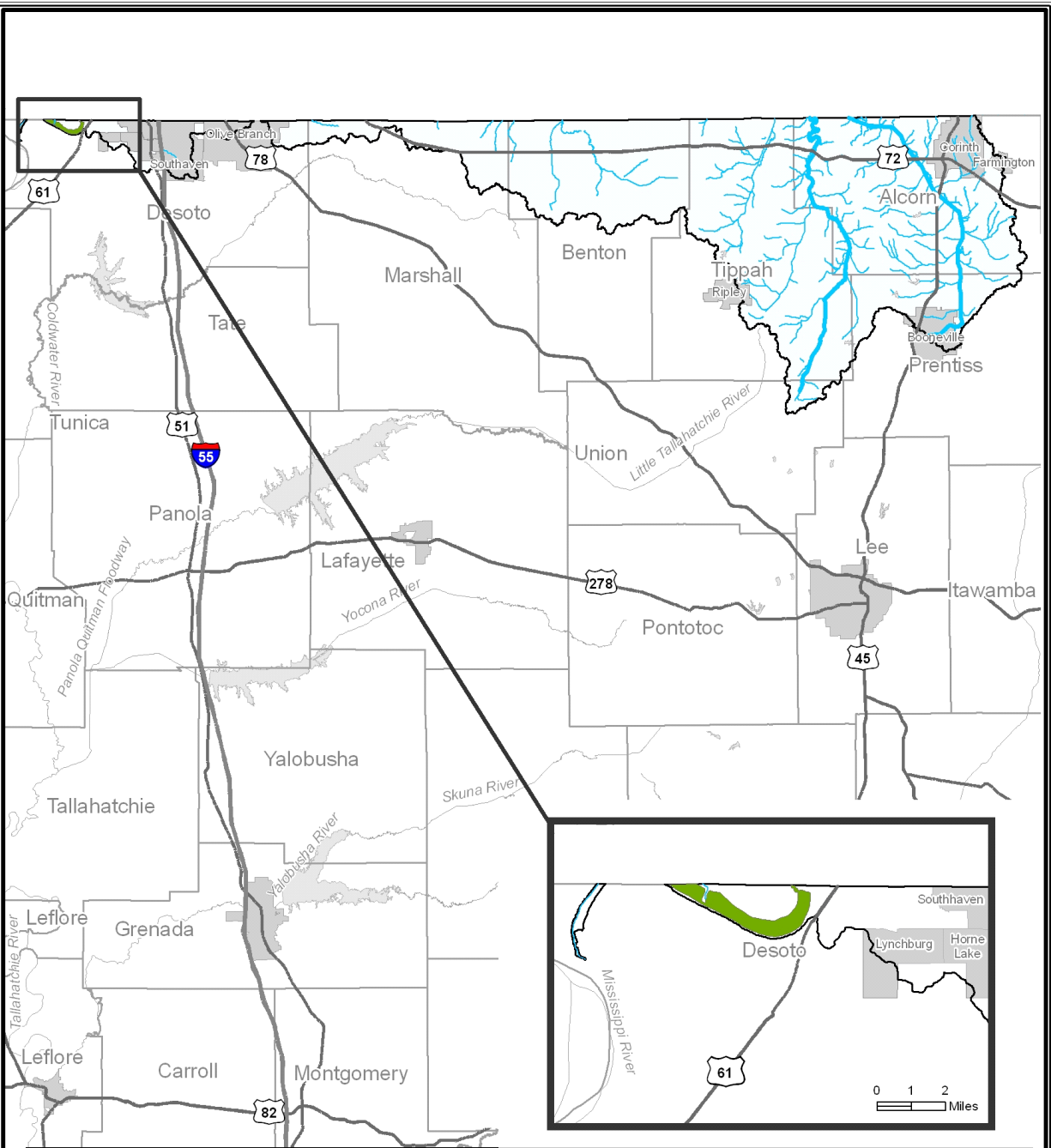
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Water Quality Standards Classification

- Shellfish Harvesting
- Shellfish Harvesting & Recreation
- Recreation
- Fish & Wildlife

- Interstate
- US Highway
- State Highway
- County Boundary
- Basin Boundary
- City
- Major River
- Reservoir or Lake

North Independent Streams Basin		
Waters	Location	Classification
Horn Lake	DeSoto County	Recreation

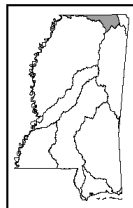


North Independent Streams Basin Water Quality Standards

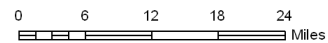
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Mississippi Basins

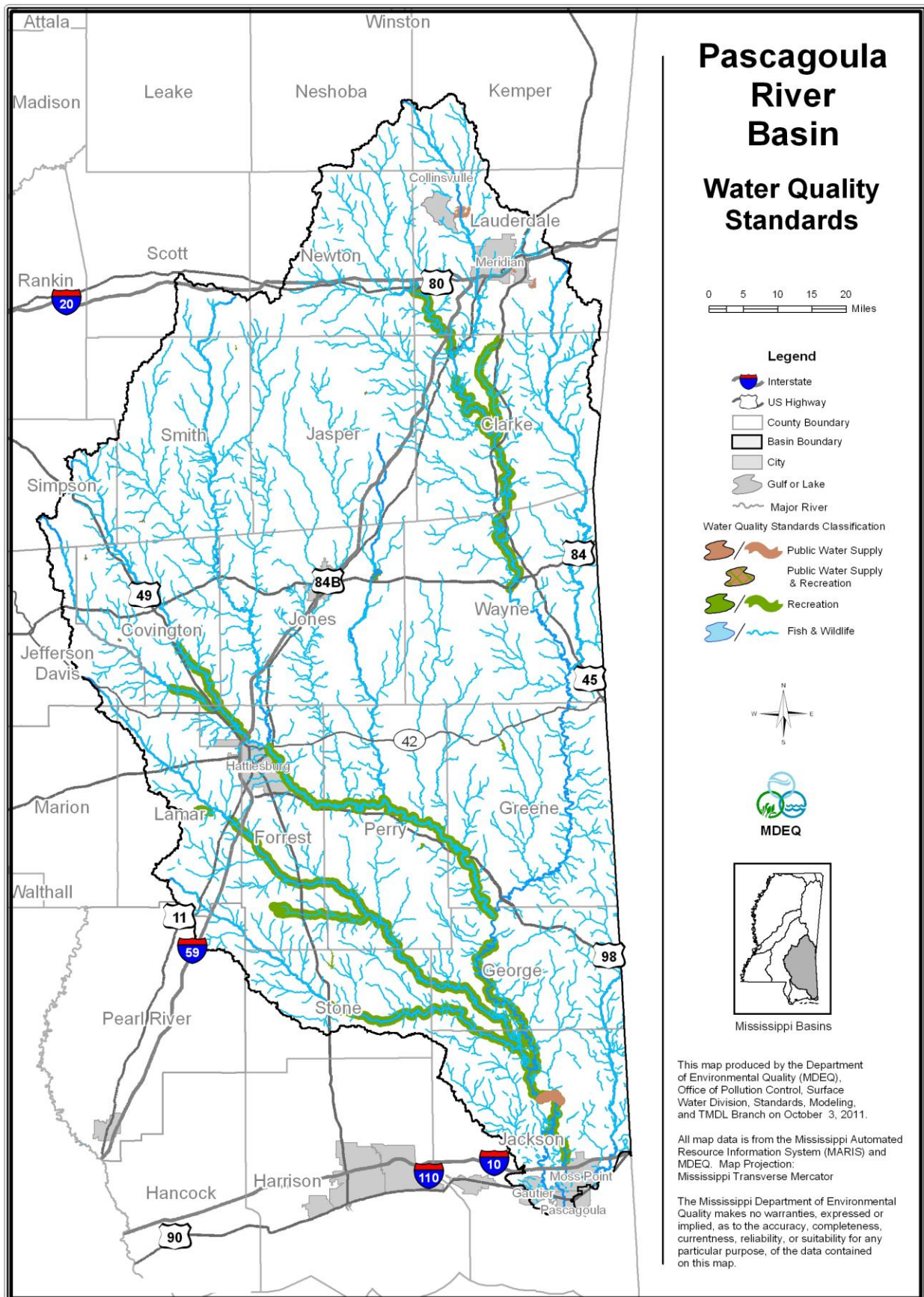


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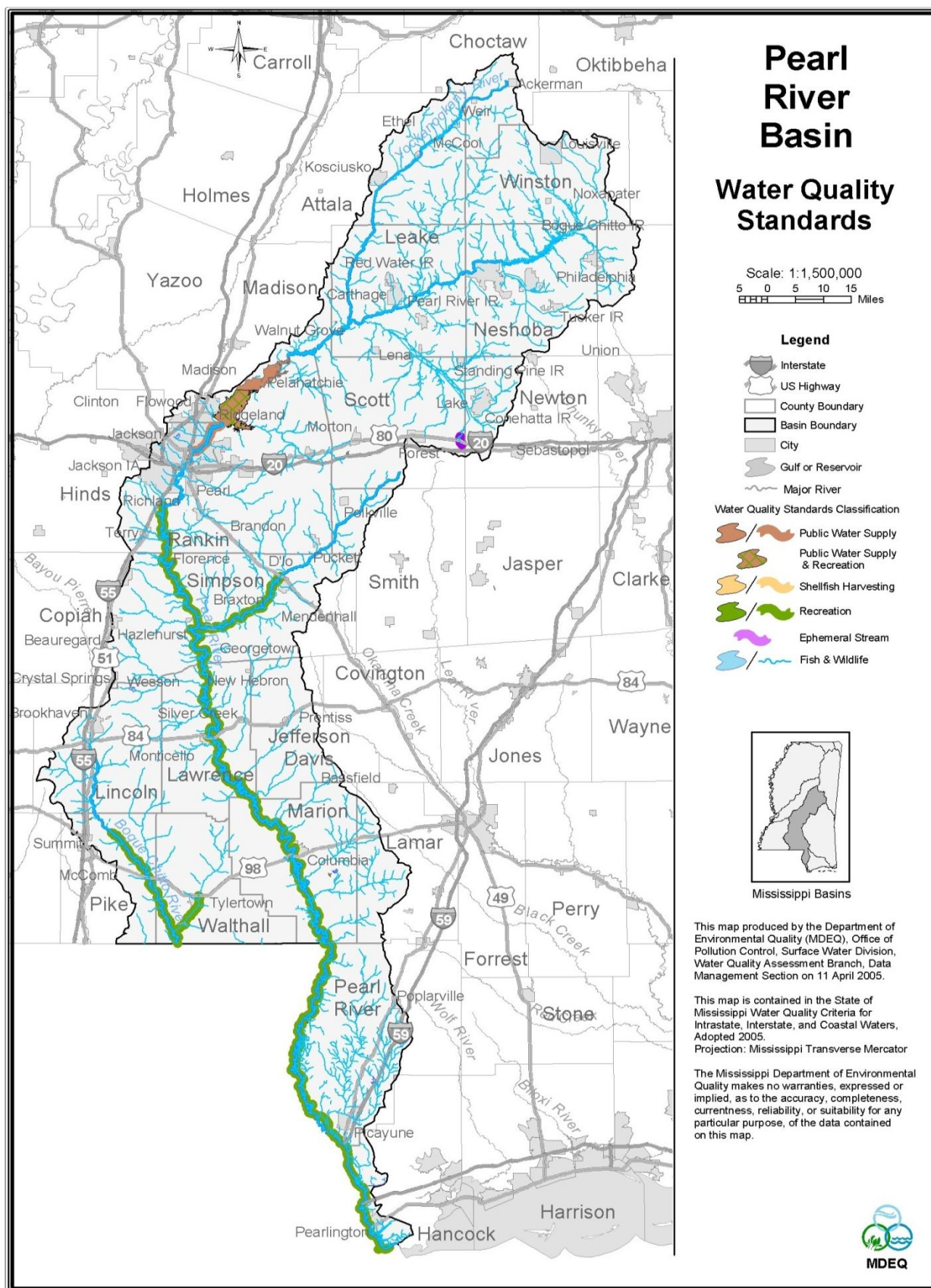
- | | |
|--|-------------------|
| Water Quality Standards Classification | Interstate |
| Recreation | US Highway |
| Fish & Wildlife | County Boundary |
| | Basin Boundary |
| | City |
| | Major River |
| | Reservoir or Lake |

Pascagoula River Basin		
Waters	Location	Classification
Archusa Reservoir	Clarke County	Recreation
Beaverdam Creek	From headwaters in Perry and Forrest Counties to Black Creek	Recreation
Black Creek	From Hwy 11 to the Pascagoula River	Recreation
Bonita Reservoir	Lauderdale County	Public Water Supply
Bowie Creek	From MS Hwy 589 to the Bowie River	Recreation
Bowie River	From Bowie Creek to Interstate 59	Recreation
Chickasawhay River	From Stonewall to MS Hwy 84	Recreation
Chunky River	From US Hwy 80 to the Chickasawhay River	Recreation
Clarke State Park (Ivy Lake)	Clarke County	Recreation
Dry Creek Lake Site #3	Covington County	Recreation
Escatawpa River	From River Mile 10 to the Pascagoula River	Fish and Wildlife ¹⁴
Flint Creek Reservoir	Stone County	Recreation
Lake Bogue Homa	Jones County	Recreation
Lake Claude Bennett	Jasper County	Recreation
Lake Geiger	Forrest County	Recreation
Lake Marathon	Smith County	Recreation
Lake Mike Conner	Covington County	Recreation
Lake Perry	Perry County	Recreation
Lake Ross Barnett	Smith County	Recreation
Lake Shongela	Smith County	Recreation
Lakeland Park Lake	Wayne County	Recreation
Leaf River	From Hwy 42 to the Chickasawhay River	Recreation
Long Creek Reservoir	Lauderdale County	Public Water Supply
Okatibbee Reservoir	Lauderdale County	Public Water Supply Recreation
Okatoma Creek	From Seminary (MS Hwy 590) to the Bowie River	Recreation
Pascagoula River	From 5 miles north of Cumbest Bluff to Cumbest Bluff	Public Water Supply
Pascagoula River	From 6 miles north of MS Hwy 26 (George County) to Smear Bayou (Jackson County)	Recreation
Red Creek	From US Hwy 49 to Big Black Creek	Recreation
Turkey Creek Reservoir	Greene County	Recreation

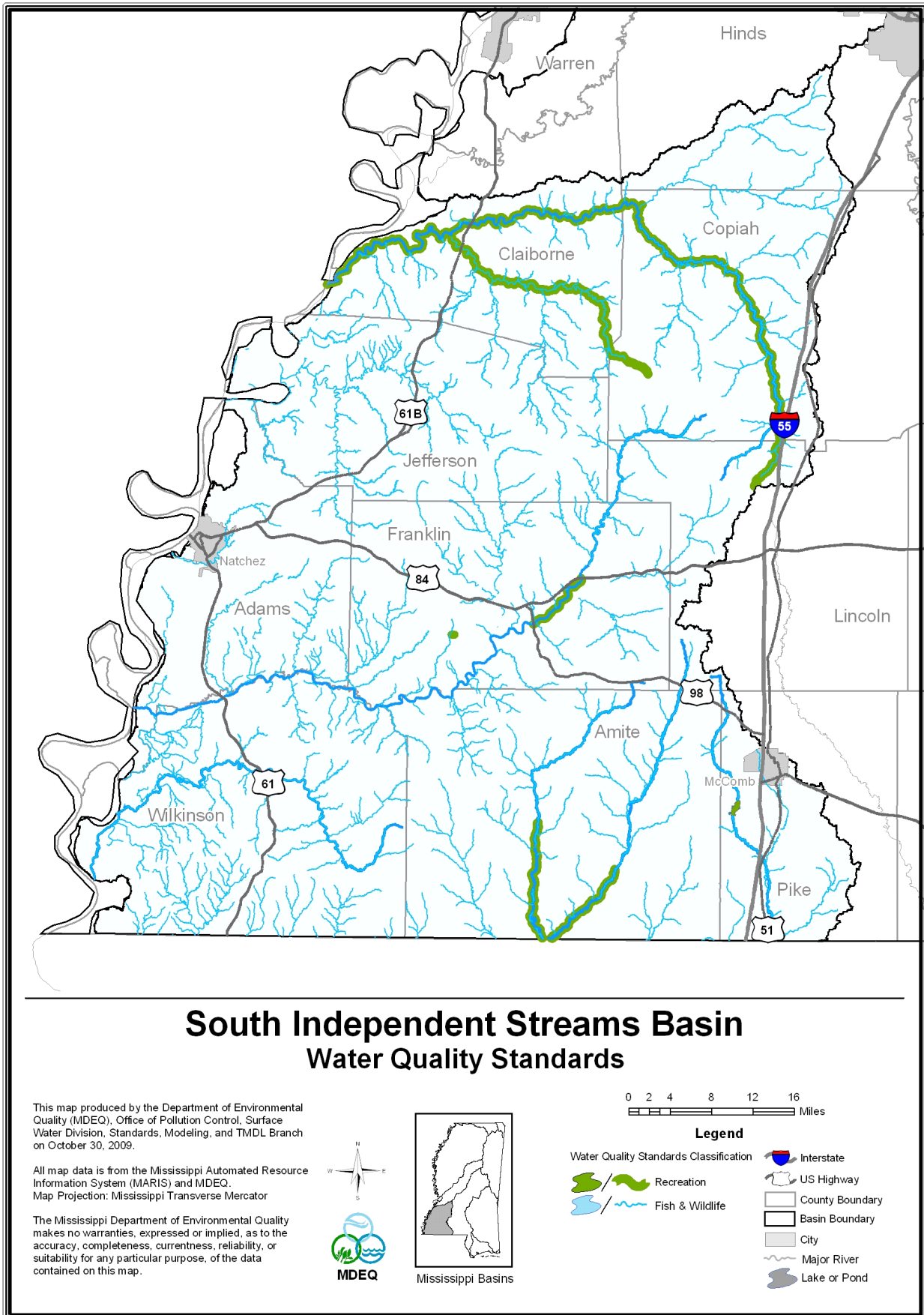
¹⁴ The following dissolved oxygen standard is applicable for this segment: dissolved oxygen concentrations shall not be less than a daily average of 3.7 mg/l from May 1 through October 31. Additional information regarding the derivation and implementation of this criterion can be found in the report titled *A Site-Specific Dissolved Oxygen Criterion for the Escatawpa River: Criteria Derivation and Implementation*.



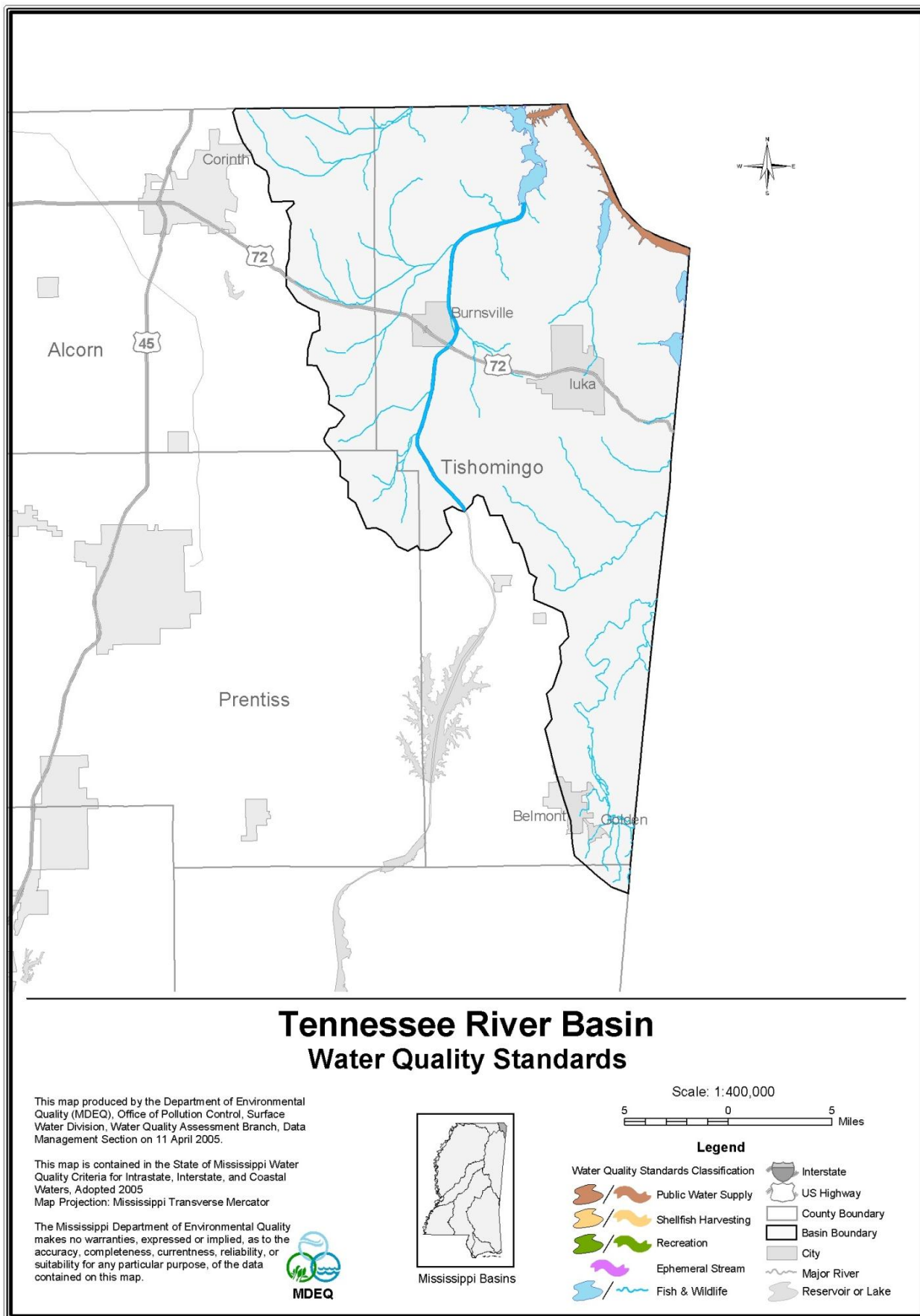
Pearl River Basin		
Waters	Location	Classification
Ross Barnett Reservoir	Madison and Rankin Counties	Recreation
Ross Barnett Reservoir	From River Bend to the Reservoir Dam	Public Water Supply
Bogue Chitto River	From MS Hwy 570 to the MS/LA State Line	Recreation
Lake Columbia	Marion County	Recreation
Lake Dixie Springs	Pike County	Recreation
Magees Creek	From US Hwy 98 to the Bogue Chitto River	Recreation
Pearl River	From Barnett Reservoir to the City of Jackson Water Intake	Public Water Supply
Pearl River (including Ross Barnett Reservoir)	From Hwy 16 near Edinburg to the Mississippi Sound	Recreation
Strong River	From US Hwy 49 to the Pearl River	Recreation
Shadow Lake (Roosevelt State Park)	Scott County	Recreation
Legion Lake	Simpson County	Recreation
Unnamed Drainage Ditch	From Lake POTW (MS0025194) to Warrior Branch	Ephemeral



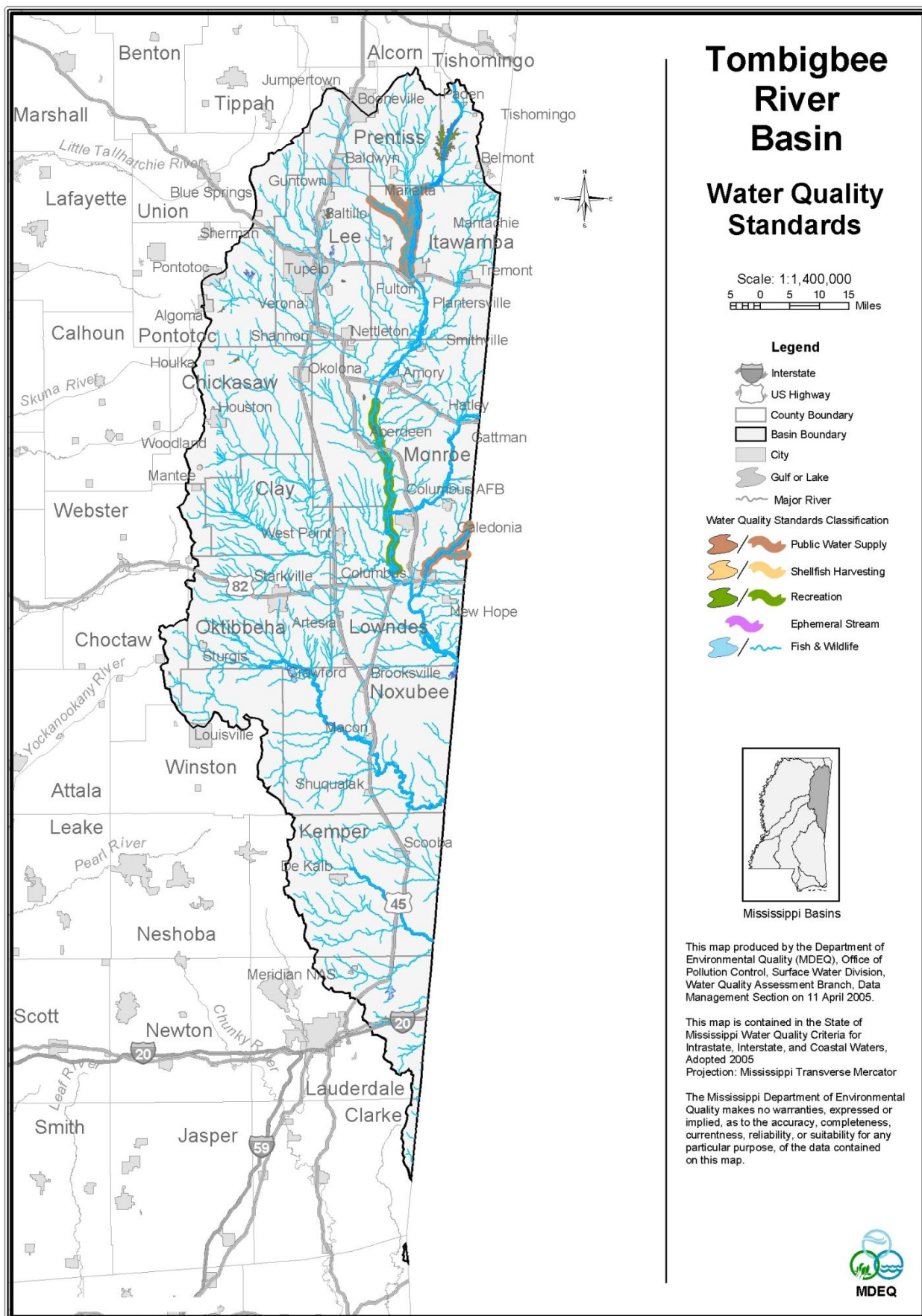
South Independent Streams Basin		
Waters	Location	Classification
Bayou Pierre	From headwaters to the Mississippi River	Recreation
Clear Springs Lake	Franklin County	Recreation
East Fork Amite River	From MS Hwy 584 to the MS/LA State Line	Recreation
Homochitto River	From US Hwy 84 to US Hwy 98	Recreation
Little Bayou Pierre	From headwaters to Bayou Pierre	Recreation
Percy Quinn State Park Lake	Pike County	Recreation
West Fork Amite River	From MS Hwy 24 to the MS/LA State Line	Recreation



Tennessee River Basin		
Waters	Location	Classification
Bear Creek	From MS/AL State Line to the MS/AL State Line	Recreation
Pickwick Lake (including Yellow Creek Embayment)	Tishomingo County	Public Water Supply Recreation
Tennessee River	From MS/AL State Line to the MS/TN State Line	Public Water Supply Recreation
Tenn-Tom Waterway	From Pickwick Lake to Little Yellow Creek	Public Water Supply Recreation

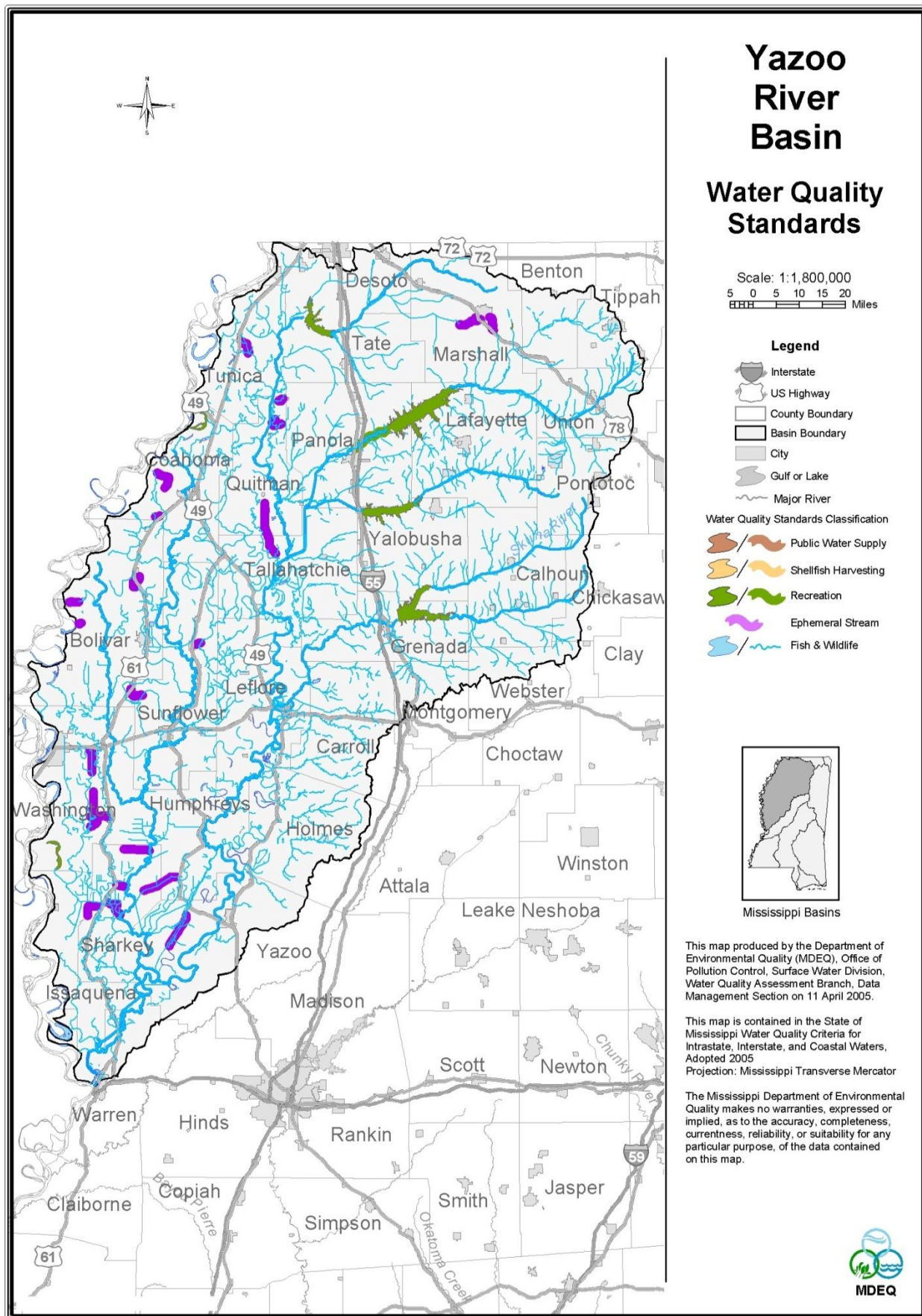


Tombigbee River Basin		
Waters	Location	Classification
Aberdeen Lake (Tenn-Tom Waterway)	From Mile 355.5 to Mile 364.3 (Normal Pool Elevation 190.0)	Recreation
Bay Springs Lake (Tenn-Tom Waterway)	From Mile 410.0 to Mile 419.0 (Normal Pool Elevation 414.0)	Recreation
Canal Section Pool "C" (Tenn-Tom Waterway)	From Mile 389.0 to Mile 396.4 (Normal Pool Elevation 270.0)	Recreation
Chiwapa Reservoir	Pontotoc County	Recreation
Choctaw Lake	Choctaw County	Recreation
Columbus Lake (Tenn-Tom Waterway)	From Mile 332.9 to Mile 355.5 (Normal Pool Elevation 163.0)	Recreation
Davis Lake	Chickasaw County	Recreation
Donivan Creek	From Natchez Trace Parkway to the Tombigbee River	Public Water Supply
Lake Lamar	Lee County	Recreation
Lake Lowndes	Lowndes County	Recreation
Lake Monroe	Monroe County	Recreation
Lake Tom Bailey	Lauderdale County	Recreation
Luxapallila Creek	From the MS/AL State Line to Hwy 50	Public Water Supply Recreation
Oktibbeha County Lake	Oktibbeha County	Recreation
Tenn-Tom Waterway	From Montgomery Lock Dam to Hwy 25 near Fulton	Public Water Supply
Twentymile Creek	From Natchez Trace Parkway to the Tombigbee River	Public Water Supply
Tombigbee River	From Boat Ramp Road to Hwy 78	Public Water Supply
Tombigbee State Park Reservoir	Lee County	Recreation
Yellow Creek	From the MS/AL State Line to Luxapallila Creek	Public Water Supply



Yazoo River Basin		
Waters	Location	Classification
Arkabutla Reservoir	DeSoto and Tate Counties	Recreation
Canal #12	From Delta City Utility District (MS0038164) to the Big Sunflower River	Ephemeral
Chewalla Reservoir	Marshall County	Recreation
Drainage Ditch #3	From Rosedale POTW (MS0020630) to Lane Bayou	Ephemeral
Enid Reservoir	Panola, Lafayette, and Yalobusha Counties	Recreation
Grenada Reservoir	Grenada County	Recreation
Lake Dumas	Tippah County	Recreation
Lake Washington	Washington County	Recreation
Little Tallahatchie River	From Sardis Reservoir to US Hwy 51	Recreation
Moon Lake	Coahoma County	Recreation
Sardis Reservoir	Panola and Lafayette Counties	Recreation
Straight Bayou Drainage Main Ditch "A"	From Louise POTW (MS0044512) to Unnamed Tributary of Silver Creek	Ephemeral
Tillatoba Lake	Yalobusha County	Recreation
Unnamed Drainage Canal	From Anguilla POTW (MS0020541) to the Big Sunflower River	Ephemeral
Unnamed Drainage Ditch	From Arcola POTW (MS0037311) to Black Bayou	Ephemeral
Unnamed Drainage Ditch	From Beulah POTW (MS0042285) to Leban Bayou	Ephemeral
Unnamed Drainage Ditch	From Crenshaw POTW (MS0026930) to David Bayou	Ephemeral
Unnamed Drainage Ditch (Hollandale)	From Farm Fresh Catfish POTW (MS0039535) to Black Bayou	Ephemeral
Unnamed Drainage Ditch	From Farrell to POTW (MS0045187) Overcup Slough	Ephemeral
Unnamed Drainage Ditch	From Lambert POTW (MS0020231) to Muddy Bayou	Ephemeral

Yazoo River Basin Continued		
Waters	Location	Classification
Unnamed Drainage Ditch	From Leland POTW (MS0020761) to Black Bayou	Ephemeral
Unnamed Drainage Ditch	From Lurand Utility District (MS0045080) to the Big Sunflower River	Ephemeral
Unnamed Drainage Ditch	From Rolling Fork POTW (East Lagoon) (MS0025585) to the Little Sunflower River	Ephemeral
Unnamed Drainage Ditch	From Rolling Fork POTW (West Lagoon) (MS0025593) to Indian Bayou	Ephemeral
Unnamed Drainage Ditch	From Ruleville POTW (MS0024945) to the Quiver River	Ephemeral
Unnamed Drainage Ditch	From Shaw POTW (MS0024953) to Porter Bayou	Ephemeral
Unnamed Drainage Ditch	From Shelby POTW (MS0025089) to Mound Bayou	Ephemeral
Unnamed Drainage Ditch	From Simmons Farm Raised Catfish (Yazoo County) (MS0039403) to Unnamed Tributary of Lake George	Ephemeral
Unnamed Drainage Ditch	From Sledge POTW (MS0021016) to David Bayou	Ephemeral
Unnamed Drainage Ditch	From Tunica POTW (MS0042323) Unnamed Tributary of White Oak Bayou	Ephemeral
Unnamed Drainage Ditch	From Winstonville POTW (MS0026450) to the ephemeral ditch west of Winstonville	Ephemeral
Wall Doxey State Park Reservoir (Spring Lake)	Marshall County	Recreation



Source Miss. Code Ann. §§ 49-2-9, 49-17-17, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Part 6, Chapter 3: Mississippi Commission on Environmental Quality Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators

TABLE OF CONTENTS

Rule 3.1 General

Rule 3.2 Definitions

Rule 3.3 Classification of Wastewater Facilities

Rule 3.4 Certification Requirements

Rule 3.5 Operator Responsibilities

Rule 3.6 Renewal of Certificates

Rule 3.7 Revocation or Suspension of Certificates

Rule 3.8 Enforcement and Appeals

Rule 3.1 General

- A. These regulations are promulgated under the authority provided by Miss. Code Ann. Section 21-27-207.
- B. Miss. Code Ann. Section 21-27-211 requires that beginning on July 1, 1987, all municipal and domestic wastewater treatment plants be operated by persons who are certified as qualified to operate such facilities.
- C. Certificates shall be valid for three (3) years, unless revoked or invalidated for cause.
- D. In the event of temporary loss of an operator, notice shall be immediately given to the Department and the continued operation of such facility without a certified operator may proceed on an interim basis for a period not to exceed one hundred eighty (180) days, except for good cause shown upon petition to the Department.
- E. These regulations do not pertain to a wastewater treatment facility treating wastewater generated solely by an industry and owned and operated by said industry.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.2 Definitions.

- A. "Association" means the Mississippi Water and Pollution Control Operator's Association.
- B. "Certificate," the certification of competency issued by the Department stating that the operator has met the requirements for the specified operator classification.
- C. "Commission," the Mississippi Commission on Environmental Quality.
- D. "Community water system" means any water system serving piped water for human consumption to fifteen (15) or more individual service connections used year-round by consumers or regularly serving twenty-five (25) or more individual consumers year-round, including, but not by way of limitation, any collection, pretreatment, treatment, storage and/or distribution facilities or equipment used primarily as part of, or in connection with, such system, regardless of whether or not such components are under the ownership or control of the operator of such system.
- E. "Department," the Mississippi Department of Environmental Quality.
- F. "Experience," means direct observation of and/or participation in the operation and maintenance of a wastewater facility, including, but not limited to, process control activities, facility maintenance, record keeping and NPDES monitoring activities. Experience requirements must be in accordance with the facility minimum visitation schedule as outlined in Section 5, Operator Responsibilities.
- G. "Operator," the person who directly supervises and is personally responsible for the daily operation and maintenance of a wastewater facility, community water system or commercial nonhazardous solid waste management landfill.
- H. "Person," the state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and includes any officer or governing or managing body of any municipality, political subdivision, or public or private corporation, or the United States or any officer or employee thereof.
- I. "Pollution," the contamination or other alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity, or odor of the waters, or the discharge of any liquid, gaseous, solid, radioactive or other substance or heat into any waters of the State.
- J. "Professional Reference," a person (other than a relative or a subordinate) who is familiar with the applicant's experience working in a wastewater facility.
- K. "Wastewater Facilities," the pipelines or conduits, pumping stations, force mains, treatment plants, lagoons or any other structure, device, appurtenance or facility, whether operated individually or in any combination, used for collecting, treating and/or disposing of municipal or domestic wastewater, by either surface or underground methods, which is required to have a permit under the provisions of Miss. Code Ann. Section 49-17-29.

- L. "Waters of the state," the waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems and all other bodies or accumulations of water, surface and underground, natural or artificial, situated wholly or partly within or bordering upon the state, and such coastal waters as are within the jurisdiction of the state, except lakes, ponds or other surface waters which are wholly landlocked and privately owned.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.3 Classification of Wastewater Facilities.

- A. Wastewater facilities shall be classified in accordance with criteria outlined below. The facility operator must be certified at a level equivalent to or higher than the facility classification.

CLASS	FACILITY DESIGN	CAPACITY
I-C	Collection only (voluntary)	up to 1,000,000 GPD (1.0 MGD)
II-C	Collection only (voluntary)	greater than 1,000,000 GPD (1.0 MGD)
I	Waste Stabilization Lagoon Septic Tank-Sand Filter	All
II	Aerated Lagoon Trickling Filter Activated Sludge	All less than 300,000 GPD (0.3 MGD) less than 100,000 GPD (0.1 MGD)
III	Trickling Filter Activated Sludge	300,000 to 3,000,000 GPD (0.3 to 3.0 MGD) 100,000 to 2,000,000 GPD (0.1 to 2.0 MGD)
IV	Trickling Filter Activated Sludge	greater than 3,000,000 GPD (3.0 MGD) greater than 2,000,000 GPD (2.0 MGD)

- B. Special cases which do not fall within the guidelines shall be considered on an individual basis and classified by the Department.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.4 Certification Requirements.

- A. Operator Qualifications for Certification

- (1) Class IV

- (a) The applicant must have at least a bachelor's degree in engineering, biological sciences, mathematics, chemistry, or physics from an accredited college or university, at least one (1) year of experience in a Class IV wastewater facility, pass the required written examination and submit two (2) professional references, or
 - (b) The applicant must be a graduate of an accredited high school, or equivalent (GED) have at least six (6) years experience in a Class IV or Class III wastewater facility, of which one (1) year must be in a Class IV plant, pass the required examination and submit two (2) professional references.
- (2) Class III
 - (a) The applicant must have graduated from an accredited high school, or equivalent (GED), have at least three (3) years of experience in a Class IV, III, or II wastewater facility, of which one (1) year must be in a Class IV or Class III plant, pass the required written examination and submit two (2) professional references, or
 - (b) The applicant must have a minimum of six (6) years experience in a Class IV, III, or II wastewater facility, of which one (1) year must be in a Class IV or Class III plant, pass the required written examination and submit two (2) professional references.
- (3) Class II
 - (a) The applicant must have graduated from an accredited high school, or equivalent (GED), have at least one (1) year of experience in a Class IV, III, or II wastewater facility, pass the required written examination and submit one (1) professional reference, or
 - (b) The applicant must have a minimum of three (3) years experience in a wastewater facility, of which one (1) year must be in a Class IV, III, or II plant, pass the required written examination and submit one (1) professional reference.
- (4) Class I

The applicant must have at least one (1) year of experience in a wastewater facility, pass the required written examination and submit one (1) professional reference.
- (5) Class I-C

The applicant must have at least one (1) year experience working in a collection system, pass the required written examination and submit one (1) professional reference.

(6) Class II-C

- (a) The applicant must have graduated from an accredited high school, or equivalent (GED), have at least two (2) years experience working in a collection system, of which one (1) year must be in a Class II-C system, pass the required written examination and submit two (2) professional references, or
- (b) The applicant must have four (4) years experience working in a collection system, one (1) year of which must be in a Class II-C system, pass the required written examination and submit two (2) professional references.

(7) Operators who have completed college courses, short courses, correspondence courses, etc., may be given credit for any deficiency in their experience and/or education, except that such courses cannot be substituted for one (1) year of wastewater facility experience. The Department shall award credit for experience using the following criteria:

- (a) Eight (8) weeks of classroom instruction in the operation and maintenance of wastewater treatment facilities will be equivalent to one (1) year experience.
- (b) Four (4) weeks of Department or Association sponsored classroom instruction in the operation and maintenance of wastewater treatment facilities will be equivalent to one (1) year experience.
- (c) Each year of college completed in engineering, biological sciences, mathematics, chemistry, or physics will be considered the equivalent of two (2) years experience. Thirty (30) semester hours are equal to one (1) year of college.
- (d) Special education, training, or experience which does not fall within these guidelines shall be considered in individual cases by the Department.

B. Professional References

Persons who are familiar with the applicant's experience working in a wastewater facility must complete professional reference forms provided by the Department. These forms must be submitted with the certification application.

C. Application

- (1) An operator desiring to be certified shall file an application with the Department on a form provided by the Department.
- (2) The Department shall review applications and supporting documents and experience of the applicant, determine the eligibility of the applicant, and

issue certificates when the applicant meets the requirements of the Municipal and Domestic Water and Wastewater System and Nonhazardous Solid Waste Management Facilities Operator's Certification Act of 1992 and these regulations.

- (3) The Commission may deny an application if the Commission determines that the applicant has not complied with all of the provisions of these regulations and with all other applicable Federal, State and local statutes and regulations or has submitted inaccurate or false information in the application, or has submitted incomplete application forms after being notified in writing by the Department that the application is incomplete. The Commission shall make determinations regarding issuance or denial of the certificate based upon the information contained in the application, the applicant's actions during any prior term of certification, and any other pertinent information that is available to the Commission.

D. Examinations

- (1) The Department shall prepare written examinations to be used in determining knowledge, ability, and judgment of the operators.
- (2) Examinations shall be held at places and times set by the Department.
- (3) A fee, to be set by the Commission, will be charged for the examination.
- (4) An operator who passes an examination must be certified within three (3) years following the date the examination was taken. Otherwise, the operator will be required to take another written examination in order to be certified.
- (5) An operator who fails to pass an examination may repeat the examination at the next regularly scheduled examination.
- (6) Examination papers will not be returned to the operator.
- (7) An operator who fails to pass an examination may review his paper by submitting a written request to the Department within thirty (30) days following notification of the examination grade.
- (8) No operator shall be allowed to sit for a Class III or Class IV examination without proof of having taken and passed a Class II examination.

E. Reciprocity

- (1) An applicant may be certified without examination provided that the individual has passed the appropriate class Association of Boards of Certification (ABC) examination or any state's (or other certifying authority's) examination that has been approved as equivalent by ABC.

- (2) Applicants for certification through reciprocity must meet the education and experience requirements for the class certificate requested as previously described.

F. Certification Fees

- (1) A fee to be set by the Commission shall be charged for certification and renewal in any classification and must accompany the application for certification or renewal.
- (2) Fees from applicants who are not certified will be returned.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.5 Operator Responsibilities.

- A. Certified operators in charge of wastewater facilities must personally visit said facilities at a sufficient frequency and duration to perform such tasks as may be required by the permit and to ensure proper operation and management of said wastewater facilities. Unless otherwise stated in the facility's permit or an order of the Commission, certified operators in charge of wastewater facilities shall visit the facilities, as a minimum, according to the following schedule:

Class I Facility	One (1) day per week
Class II Facility	Two (2) days per week
Class III Facility	Three (3) days per week
Class IV Facility	Five (5) days per week

- B. Certified operators in charge of wastewater facilities shall be thoroughly familiar with all monitoring and reporting requirements mandated by the facility's permit and shall ensure said facility complies with these requirements.
- C. Certified operators in charge of wastewater facilities must maintain written documentation of each facility visit. Documentation of facility visits shall be made available to the Department upon request.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.6 Renewal of Certificates

- A. Subject to the provisions of Rule 3.5.B., certificates may be renewed without examination, however, in order to be eligible for certificate renewal, a certification renewal application should be filed prior to the expiration of the existing certificate. The application must be accompanied by the renewal fee and also proof of completing the continuing education requirements found in the below paragraph C. Additionally, an operator, if practicing, must have demonstrated competency. Certified operators who file

renewal applications more than sixty (60) days after the expiration of their certificate will be required to pass the written exam in order to be eligible for certification.

- B. Notwithstanding the provisions of Rule 3.5.A., any wastewater facility operator who holds a restricted certificate (i.e., valid only for a particular facility and/or class of facilities) may obtain a renewal certificate with identical restrictions provided that all conditions of paragraph A. are satisfied.
- C. Continuing education
 - (1) Operators must receive thirty six (36) hours of related continuing education during the three (3) year period for which their certification is valid. A minimum of eighteen (18) of this thirty six (36) hours must be satisfied by attending Department sponsored training.
 - (2) Certified collection system operators must receive eighteen (18) hours of related continuing education during the three (3) year period that their certification is valid.
 - (3) Operators who have been certified for three (3) consecutive three (3) year periods, must receive twenty four (24) hours of continuing education during the fourth and subsequent three (3) year periods for which their certificate is valid. A minimum of twelve (12) hours must be satisfied by attending Department sponsored training, or Association sponsored Short Courses.
 - (4) Exceptions to the twenty four (24) hours of Department sponsored training requirement may be considered by the Department in individual cases, such as operators who possess valid Mississippi Certificates and are employed and reside outside the state of Mississippi, provided they submit proof of attendance of equivalent training.
 - (5) Continuing education credit will be given as follows:
 - (a) Attending one (1) day of Department sponsored training will be equivalent to six (6) hours of continuing education.
 - (b) Attending one (1) Association sponsored week long wastewater treatment short course will be equivalent to thirty two (32) hours of Department sponsored continuing education.
 - (c) Association sponsored wastewater continuing education short courses will be evaluated, upon request, based on technical content, and Department sponsored continuing education credit will be awarded for actual hours attended.
 - (d) Certified Operators who serve as instructors/presenters at Association sponsored training sessions shall receive two (2) hours of continuing education for each hour of actual presentation time.

- (e) Attending one (1) Association monthly District meeting will be equivalent of to one (1) hour of continuing education. Association District meetings and/or training sessions held other than on a monthly basis, will be evaluated, upon request, based on technical content, and continuing education credit will be awarded for actual hours attended.
- (f) Association annual conferences will be evaluated, upon request, based on technical content, and Department sponsored continuing education credit will be awarded for actual hours attended.
- (g) Organizations that provide technical training, including, but not limited to, the Mississippi Water Environment Association and the Mississippi Rural Water Association may request Department approval of training for continuing education credit. The Department shall consider requests for Department sponsored continuing education credit for training in which the Department staff actively participate in the continuing education curriculum development, presentation and evaluation.
- (h) Special schools, experience, training, correspondence courses, and/or other education and/or experiences may be approved at the discretion of the Department.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.7 Revocation or Suspension of Certificates.

- A. The Commission may revoke or suspend the certificate of an operator, following a hearing before the Commission, when it is found that the operator:
 - (1) has practiced fraud or deception,
 - (2) fails to use reasonable care, judgment, and/or apply knowledge in the performance of duties,
 - (3) is incompetent or unable to properly perform duties,
 - (4) knowingly submits false or inaccurate information for issuance or renewal of a certificate under these regulations,
 - (5) willfully fails to comply with the conditions of the certificate issued by the Commission, or
 - (6) violates any provision of these regulations, the Municipal and Domestic Water and Wastewater System and Nonhazardous Solid Waste Management Facilities Operator's Certification Act of 1992, or any applicable Rule, regulation or written order of the Commission.

- B. In the event the Commission suspends the certificate of an operator, the Commission may, as a part of the suspension, require the operator to comply with all applicable laws and regulations, to obtain additional continuing education and/or to complete other actions as required by the Commission. Failure to comply with the terms of the suspension may result in revocation of the operator's certificate.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 3.8 Enforcement and Appeals.

Enforcement and appeals shall be in accordance with the Municipal and Domestic Water and Wastewater System and Nonhazardous Solid Waste Management Facilities Operator's Certification Act of 1992.

Source: Miss. Code Ann. §§ 21-27-201, *et seq.*, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Part 6, Chapter 4: Mississippi Commission on Environmental Quality State Revolving Fund Loan Program Regulations (Effective for Projects Funded Prior to 10/1/2000)

TABLE OF CONTENTS

Rule 4.1 Introductory Provisions

Rule 4.2 Program Requirements

Rule 4.3 Project Requirements

APPENDICES

- A. Determination of Eligible and Allowable Costs
 - B. Allowances for Facilities Planning, Design and Construction Phase Services
 - C. SRF National Environmental Policy Act (NEPA) Compliance Procedures
 - D. Procurement Requirements for SRF Loan Recipients
 - E. SRF MBE/WBE Requirements
 - F. Debarment and Suspension
 - G. SRF Disputes Procedures
 - H. Cross-Cutting Federal Laws
 - I. Waste, Fraud, and Abuse
 - J. SRF Loan Recipient Accounting and Auditing Procedures
 - K. Intergovernmental Review Process
 - L. SRF Procurement Protest Procedures
 - M. Related State Laws and Regulations
 - N. Buffer Zone Requirements
-

Rule 4.1 Introductory Provisions.

- A. **Scope of Regulations.** These regulations, adopted pursuant to Section 49-17-61, Mississippi Code of 1972, as amended, shall govern the Mississippi Water Pollution Control Revolving Fund Program. These regulations may be superceded by the SRF loan agreement when approved by the Department staff and when not in conflict with any state or federal law or executive order.
- B. **Effective Date of Regulations.** These regulations are effective December 1, 1999. These regulations shall also apply to loan agreements executed prior to this date unless the loan recipient requests that the previously effective regulations apply.
- C. **Definitions.** The following words and terms, when used in this regulation, shall have the following meanings, unless the context clearly indicates otherwise:
 - (1) **Act** - The Federal Water Pollution Control Act, as amended, 33 USC 1251, et seq., including any future amendments.
 - (2) **Alternative Technology** - Proven wastewater treatment processes and techniques which provide for the reclaiming and reuse of water, productively recycle wastewater constituents or otherwise eliminate the discharge of pollutants, or recover energy. Specifically, alternative technology includes land application of effluent and sludge; aquifer recharge; aquaculture; direct reuse (non-potable); horticulture; revegetation of disturbed land; containment ponds; sludge composting and drying prior to land application; self-sustaining incineration; methane recovery; individual and onsite systems; and small diameter pressure and vacuum sewers and small diameter gravity sewers carrying partially or fully treated wastewater.
 - (3) **Authorized Representative** - The signatory agent of the applicant authorized and directed by the applicant's governing body to make application for assistance and to sign documents required to undertake and complete the project, on behalf of the applicant. The signatory agent must be a member of, or an employee of, the applicant's governing body, and may not be under a separate contract with the applicant at any time during the execution of the project.
 - (4) **Best Practicable Waste Treatment Technologies** - The cost-effective technology that can treat wastewater, combined sewer overflows and nonexcessive infiltration and inflow in publicly owned or individual wastewater treatment works to meet the applicable provisions of federal and state effluent limitations, groundwater protection, or other applicable standards.
 - (5) **Binding Commitment** - A legal obligation, enforceable under State law, specifying the terms and schedules under which assistance is provided.
 - (6) **Building** - The erection, acquisition, alteration, remodeling, improvement or extension of treatment works.

- (7) Capitalization Grant - Federal grant assistance awarded to the State for the establishment of the State Water Pollution Control Revolving Fund.
- (8) Change Order - The documents issued by the loan recipient, upon recommendation of the consulting engineer, authorizing a change, alteration, or variance in previously approved engineering plans, specifications, and contract documents, including but not limited to, additions or deletions of work to be performed pursuant to the contract or a change in costs or time for work performed pursuant to the contract.
- (9) Collector Sewer - The common lateral sewers, within a publicly owned treatment system, which are primarily installed to receive wastewaters directly from facilities which convey wastewater from individual systems, or from private property.
- (10) Commission - The Mississippi Commission on Environmental Quality or its successors.
- (11) Construction - Any one or more of the following: erection, building, acquisition, alteration, remodeling, improvement or extension of treatment works.
- (12) Construction Fund - A dedicated source of funds, created and maintained by the applicant in a separate account at an official depository, or a designated depository approved by the Department staff, used solely for the purposes of construction and other allowable costs of a project funded by the Commission.
- (13) Consulting Engineer - The engineer or engineering firm retained by the loan recipient to provide professional engineering services during the planning, design, and/or construction of a project.
- (14) Cost-Effectiveness Analysis - An analysis performed to determine which waste treatment management system or component part will result in the minimum total monetary (resources) costs over time, without overriding nonmonetary considerations, to meet federal, state, and local requirements and objectives.
- (15) Department - The Mississippi Department of Environmental Quality and staff.
- (16) Effluent Limitation - Any restriction established by the Department or the EPA administrator on quantities, rates, and concentrations of chemical, physical, biological and other constituents which are discharged from a point source into waters of the State.
- (17) Eligible Applicant - A public waste treatment or collection management agency or any city, town, county, district, or other public body created by or pursuant to state law which has authority to dispose of domestic wastewater, industrial wastewater, wastewater sludges resulting from the treatment of such wastewater, stormwater, or nonpoint sources of pollution, has the authority under State and

Federal law to receive SRF loan assistance, and has the ability to comply with this regulation and the requirements of the SRF loan agreement.

- (18) **Enforceable Requirements of the Act** - Those conditions and limitations of permits issued pursuant to the Act, Sections 402 and 404, which, if violated, could result in issuance of a compliance order or initiation of a civil or criminal action under the Act, Section 309. Where a permit has not been issued, but issuance is anticipated, the term means any requirement which will be in the permit when issued.
- (19) **Environmental Determination** - A finding by the Department regarding the potential environmental impacts of a proposed project and describing what mitigative measures, if any, the applicant will be required to implement as a condition of financial assistance.
- (20) **Environmental Information Document** - A written analysis prepared by the applicant describing the potential environmental impacts of a proposed project, sufficient in scope to enable the Department staff to make an environmental assessment to allow an environmental determination to be made by the Department.
- (21) **Environmental Review** - The process whereby an evaluation is undertaken by the Department, consistent with the National Environmental Policy Act and other federal, state, and local laws and requirements, to determine whether a proposed project may have significant impacts on the environment.
- (22) **EPA** - The Environmental Protection Agency.
- (23) **EPA Administrator** - The chief officer of the Environmental Protection Agency appointed by the President of the United States.
- (24) **Estuary Management Plan** - A plan for the conservation and management of an estuary of national significance as described in Section 320 of the Act.
- (25) **Executive Director** - The executive director of the Mississippi Department of Environmental Quality, or his designee.
- (26) **Facilities Planning** - Those necessary plans and studies which directly relate to treatment works needed to comply with enforceable requirements of the Act and other eligible treatment works, and which consist of a systematic evaluation of alternatives that are feasible in light of the unique demographic, topographic, hydrologic and institutional characteristics of the area and will demonstrate the selected alternative is cost-effective, practical to implement and environmentally sound.
- (27) **Financial Assistance** - Loans by the Commission from the Water Pollution Control Revolving Fund.

- (28) Fund - The State Water Pollution Control Revolving Fund, created pursuant to Section 49-17-61, Mississippi Code of 1972, as amended.
- (29) Infiltration - Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- (30) Inflow - Water other than wastewater that enters a sewer system (including sewer service connections) as a result of rainfall or rainfall induced soil moisture from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters or drainage. Inflow does not include, and is distinguished from, infiltration.
- (31) Innovative Technology - Developed wastewater treatment processes and techniques which have not been fully proven under the circumstances of their contemplated use and which represent a significant advancement over the state of the art in terms of significant reduction in life cycle cost or significant environmental benefits through the reclaiming and reuse of water, otherwise eliminating the discharge of pollutants, utilizing recycling techniques such as land treatment, more efficient use of energy and resources, improved or new methods of waste treatment management for combined municipal and industrial systems, or the confined disposal of pollutants so that they will not migrate to cause water or other environmental pollution.
- (32) Intended Use Plan - A plan identifying the intended uses of the amount of funds available in the SRF for each fiscal year as described in Section 606(c) of the Act.
- (33) Interceptor Sewer - A sewer which is designed for one or more of the following purposes:
 - (a) To intercept wastewater from a final point in an existing or proposed collector sewer and convey such wastes directly to a treatment facility or another interceptor or pump station.
 - (b) To replace an existing wastewater treatment facility and transport the wastes to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant.
 - (c) To transport wastewater from one or more municipal collector sewers to another municipality or to a regional facility for treatment.
 - (d) To intercept an existing discharge of raw or inadequately treated wastewater for transport directly to another interceptor, pump station or to a treatment plant.

- (34) Nonpoint Source Pollution Plan - A plan for managing nonpoint source pollution as described in Section 319 of the Act.
- (35) Permit, Waste Discharge Permit - The authority granted by the Mississippi Environmental Quality Permit Board to discharge treated wastewater into or adjacent to waters of the state.
- (36) Plans, Specifications and Contract Documents - The engineering description of the project including engineering drawings, maps, technical specifications, design reports and construction contract documents in sufficient detail as required by the Department staff, to allow contractors to bid on and construct the work.
- (37) Point Source - Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.
- (38) Priority List - A list of projects for which SRF assistance has been requested, and which displays projects that are both fundable during the current fiscal year and are planned for possible future funding, consistent with the current Priority System.
- (39) Priority System - The method of ranking projects for which SRF funding assistance has been requested, in order of priorities established by the Commission.
- (40) Project - The scope of work for which assistance is awarded under the SRF.
- (41) Project Completion - The date of the final construction inspection as performed by the Department.
- (42) Project Performance Standards - The performance and operational requirements applicable to a project including, but not limited to, the enforceable requirements of the Act and the specifications, which the project is planned to meet.
- (43) Refinancing - To provide SRF assistance for a project or project portion where the debt obligation was incurred and construction began prior to the date of the SRF loan award.
- (44) Regional Facility - Wastewater collection and treatment facilities, which incorporate multiple service areas into an area wide service facility, thereby reducing the number of required facilities, or any system which serves an area that is other than a single county, city, special district, or other political subdivision of the state, the specified size of which is determined by any one or combination of population, number of governmental entities served, and/or service capacity.

- (45) Service Line - A conduit intended to carry wastewater, together with minor quantities of infiltration and inflow that are not admitted intentionally, from residences, public buildings and businesses to a collector sewer.
- (46) State Allotment - The sum allocated to the State of Mississippi for a federal fiscal year, from funds appropriated by Congress pursuant to the Act.
- (47) SRF - The State Revolving Fund.
- (48) Treatment Works - Any devices and systems which are used in the storage, treatment, recycling, and reclamation of waste or which are necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units and clear well facilities; and any works, including site acquisition of the land that will be an integral part of, or used in connection with, the treatment process (including land used for the storage of treated water in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from such treatment; and any plant, disposal field, lagoon, canal, incinerator or other facilities installed for the purpose of treating, neutralizing or stabilizing wastewater or nonpoint source pollution or facilities to provide for the collection, control and disposal of wastewater or nonpoint source pollution.
- (49) Value Engineering - A specialized cost control technique which uses a systematic and creative approach to identify and focus on unnecessarily high cost in a project in order to arrive at a cost saving without sacrificing the purpose, reliability or efficiency of the project.
- (50) Water Quality Management Plan - A plan prepared and updated annually by the State and approved by the Environmental Protection Agency which determines the nature, extent, and cause of water quality problems in various areas of the State and identifies cost-effective and locally acceptable facility and nonpoint measures to meet and maintain water quality standards.

Source: *Miss. Code Ann. §§ 49-17-61 through 49-17-70, 49-17-81 through 89, 49-2-1, et seq. and 49-17-1, et seq.*

Rule 4.2 Program Requirements

- A. Eligible Applicant Determination. To be eligible for financial assistance, an applicant must meet the definition of an eligible applicant as described in Rule 4.1.C.(17) of this regulation, as determined by the Department.
- B. Obligation Period. Federal funds allotted to the State shall be available for obligation for a period of one year after the close of the federal fiscal year for which the funds are authorized.

- C. Reserves. The Commission shall reserve a percentage of the State's Title VI SRF allotment from each fiscal year for administration of the fund and for planning under Sections 205(j) and 303(e) of the Act, consistent with the Act and state law.
- D. Public Comment and Review. In accordance with the Act, the Commission shall provide for public comment and review to consider adoption of the annual intended use plan, the priority list, and the priority system. After adoption by the Commission, modifications to these documents may be adopted by the Commission as provided for in the Intended Use Plan without further public comment and review.
- E. Types of Assistance. The fund may be used for the following purposes, subject to that established in the Intended Use Plan for a given fiscal year.
 - (1) To make loans on the condition that:
 - (a) Such loans are made at or below market interest rates, at terms not to exceed 20 years.
 - (b) Monthly principal and interest payments will commence as further described in Rule 4.3.H. of this regulation, and all loans will be fully amortized not later than 20 years after project completion.
 - (c) The recipient of a loan will establish a dedicated source of revenue for repayment of loans.
 - (d) The fund will be credited with all payments of principal and interest on all loans.
 - (2) To refinance the debt obligation of eligible applicants at or below market rates when such debt obligations were incurred and construction began on or after March 7, 1985; and where such projects have complied with all applicable Title II requirements of the Act, crosscutting federal laws and executive orders, and this regulation. The prospective loan recipient agrees that by pursuing such a refinancing arrangement, he does so at his own risk, and thereby relieves the Commission, the Department, and the Department staff of all responsibility and liability should costs later be determined unallowable for any reason or should such funding not become available for any reason.
 - (3) As a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the state if the proceeds of the sale of such bonds will be deposited in the fund, and provided such authority is established in state law.
 - (4) For the reasonable costs of administering the fund and conducting activities under Title VI of the Act.
 - (5) To earn interest on fund accounts.

- F. State Capitalization Grant Application. After the Commission adopts the Intended Use Plan, including the Priority System and Priority List, the Executive Director or his designee shall submit these items with an application for the capitalization grant for that fiscal year to EPA.
- G. Federal Title II Requirements. All projects which receive loan assistance from the fund and which will be constructed in whole or in part before fiscal year 1995 with funds directly made available by capitalization grants must meet the Title II requirements under Sections 201(b), 201(g)(1), 201(g)(2), 201(g)(3), 201(g)(5), 201(g)(6), 201(n)(1), 201(o), 204(a)(1), 204(a)(2), 204(b)(1), 204(d)(2), 211, 218, 511(c)(1) and 513 of the Act. Current EPA regulations promulgated under these sections of the Act will apply, except as noted below. These requirements will be superceded by any subsequent federal law or regulation if so specified by that law or regulation. The Department may establish state procedures accepted by EPA. In applying these EPA regulations, the word "Department" shall be substituted for the word "EPA" or "Regional Administrator" and the words "loan recipient" shall be substituted for the word "grantee". A summary of these Title II requirements and the applicable regulations is as follows:
- (1) (Section 201(b), which requires that projects apply best practicable waste treatment technology (see 40 CFR 35.2005(b)(7): Definition of BPWTT; 40 CFR 35.2030(b)(2): Facilities Planning);
 - (2) Section 201(g)(1), which limits assistance to projects for secondary treatment, advanced treatment or any cost-effective alternative, new interceptors and appurtenances, and infiltration-inflow correction. This section retains the Governor's discretionary set-aside by which a State can use up to 20 percent of its allotment for other projects within the definition of treatment works in Section 212(2), and for certain non-point source control and groundwater protection purposes, as defined in section 319 of the Act (40 CFR 35.2015(b)(2)(ii-iv): State Priority System and Project Priority List);
 - (3) Section 201(g)(2), which requires that alternative technologies be considered in project design (40 CFR 53.2030: Facilities Planning);
 - (4) Section 201(g)(3), which requires that applicants show that the related sewer collection system is not subject to excessive infiltration or inflow (40 CFR 35.2030(b)(4): Facilities Planning; 40 CFR 35.2120: Infiltration/Inflow);
 - (5) Section 201(g)(5), which requires that applicants study innovative and alternative treatment technologies and take into account opportunities to construct revenue producing facilities and to make more efficient uses of energy and resources (40 CFR 35.2030: Facilities Planning);
 - (6) Section 201(g)(6), which requires that the applicant analyze potential recreation and open space opportunities in the planning of the proposed facility (40 CFR 35.2030(b)(5): Facilities Planning);

- (7) Section 201(n)(1), which provides that funds under Section 205 may be used for water quality problems due to discharges of combined sewer overflows, which are not otherwise eligible, if such discharges are a major priority in a State (40 CFR 35.2015(b)(2)(iv): State Priority Systems--categories of need and 35.2024(a): Combined Sewer Overflows);
- (8) Section 201(o), which calls on the Administrator ("State" under a capitalization grant) to encourage and assist communities in the development of capital financing plans;
- (9) Section 204(a)(1) and (2), which require that treatment works projects be included in plans developed under Sections 208 and 303(e) (40 CFR 35.2102: Water Quality management Plans);
- (10) Section 204(b)(1), which requires that communities develop user charge systems and have the legal, institutional, managerial and financial capability to construct, operate, and maintain the treatment works (40 CFR 35.2208: Adoption of Sewer Use Ordinance and User Charge System; 35.2130: Sewer Use Ordinance; 35.2140: User Charge System; 35.2214: Grantee Responsibilities; 35.2122: Approval of User Charge System and proposed Sewer Use Ordinance; 35.2110: Access to Individual Systems; and 35.2206(a):
- (11) Section 204(d)(2), which requires that, one year after the date of completion of construction and initiation of operation the owner/operator of the treatment works must certify that the facility meets design specifications and effluent limitations included in its permit (40 CFR 35.2218(c), (d), (e)(1) and (e)(2): Project Performance); except that the provisions of 40 CFR 35.2032(c) will not apply;
- (12) Section 211, Federal regulation concerning collection systems (40 CFR 35.2116) do not apply, and are replaced by the following:
 - (a) SRF assistance may be provided for sewage collection systems, provided such assistance
 - (1) is for replacement or major rehabilitation of an existing collection system and is necessary to the total integrity and performance of the waste treatment works servicing such a community, or
 - (2) is for a new collection system in an existing community with sufficient existing or planned capacity to adequately treat such collected sewage and is consistent with Section 201 of the Act. For the purposes of this regulation, the term "existing community" means those residences, public buildings, and businesses that are correctly documented as existing in the approved SRF facilities plan. If assistance is awarded, the loan recipient must cause the existing buildings to be connected to the collection system within the time specified in the loan agreement;

- (13) Section 218, which assures that treatment systems are cost-effective and requires that projects of over \$10 million include a value-engineering review (40 CFR 35.2030(b)(3): Cost Effectiveness, Facilities Planning, and 35.2114: Value Engineering); except that the provisions of Rule 4.3.B.(2) of this regulation supercede these federal regulations where applicable;
 - (14) Section 511(c)(1), which applies the National Environmental Policy Act to projects receiving Title II grants (40 CFR 35.2113: Environmental Review). The state environmental review requirements, which comply with this federal law, are discussed in greater detail in Appendix C;
 - (15) Section 513, which applies Davis-Bacon labor wage provisions to treatment works construction (see 29 CFR Part 5). Wages paid for the construction of treatment works must conform to the prevailing wage rates established for the locality by the U.S. Department of Labor under the Davis-Bacon Act (Section 513, applies 40 U.S.C. 276, et seq.).
- H. Intended Use Plan. Each fiscal year for which funds are available in the SRF, the Commission shall establish an intended use plan which shall be subjected to public comment and review prior to adoption by the Commission. The intended use plan will include the following items:
- (1) A description of both the short and long term goals and objectives of the fund.
 - (2) A list of projects for construction of treatment works which are included on the fundable portion of the Priority List and a list of activities eligible for assistance under Sections 319 and 320 of the Act. The list of projects will include the following items:
 - (a) Name of the recipient.
 - (b) Facility description.
 - (c) Project treatment/use categories.
 - (d) Treatment requirements.
 - (e) Terms of financial assistance.
 - (3) Assurances for meeting the requirements of Section 602(b) of the Act:
 - (a) The Department will enter into binding commitments equal to at least 120% of the capitalization grant payments within one year after the receipt of the grant payment.
 - (b) All funds will be expended in an expeditious manner.

- (c) All capitalization grant funds will first be used toward compliance with the enforceable requirements of the Act, including the municipal compliance deadline of July 1, 1988, in accordance with EPA guidance.
 - (d) All projects funded with funds directly made available by capitalization grants will meet the Federal Title II requirements as described in Rule 4.2.G. of this regulation.
 - (4) The Priority System which describes the method of ranking projects, the method for distribution of funds, and project action deadlines which all fundable projects must meet or be subject to bypass from the priority list.
- I. SRF Financing. The SRF has been established to provide low interest loans to assist and encourage communities to construct wastewater treatment and collection facilities required to improve water quality and public health. Types of assistance are itemized in Rule 4.2.E. of this regulation. Basic SRF financing requirements are as follows:
- (1) All eligible applicants requesting SRF assistance shall meet the following requirements in order to receive such assistance.
 - (a) The applicant's project must be on the fundable portion of the current year's Priority List.
 - (b) The applicant must enter into legal and binding commitments with the Commission and the State Tax Commission to secure financing.
 - (c) Terms of any SRF assistance will be as established in the Intended Use Plan for the projects to be funded in each fiscal year, and will be further established in the SRF loan agreement and repayment agreement.
 - (d) The applicant must complete an application, and must secure approvals of all documents required by the Department.
 - (e) The applicant must comply with the requirements of the Water Quality Act of 1987 and all applicable state laws, requirements and regulations.
 - (f) The applicant must establish a dedicated source of funds for repayment of the loan.
 - (g) The applicant must not be in violation of, or delinquent on, any provision of a previously awarded SRF loan agreement and repayment agreement.
 - (2) Payments from the fund to the loan recipient shall be made no more often than monthly, generally as construction is progressing. Except for program administration expenses, funds will not be disbursed from the construction fund without first entering into a legal and binding commitment with the Commission. Project payments are further described in Rule 4.3.G.

- J. Responsibility. The applicant (or loan recipient) is responsible for the proper planning, design, construction, operation, maintenance, replacement, performance, and fiscal integrity of the project. The Department's approval of any document does not relieve the applicant (or loan recipient) or any others of any liabilities or responsibilities. Department approval of any document is for administrative purposes only and does not establish or convey any such liability or responsibility.
- K. Other Approvals. The applicant (or loan recipient) shall obtain approval of all necessary documents from each state, local, and federal agency having jurisdiction over or funding in the project, if so required by that agency.

Source: *Miss. Code Ann. §§ 49-17-61 through 49-17-70, 49-17-81 through 49-17-89, 49-2-1, et seq. and 49-17-1, et seq.*

Rule 4.3 Project Requirements. Until such time as the State satisfies the Title II funding limitations described in Rule 4.2.G. of this regulation, all wastewater projects (as described in Section 212 of the Act) funded by the SRF must comply with the Title II requirements of Rule 4.2.G. and the crosscutting requirements in Appendix H. In addition, the following project requirements also apply:

A. Facilities Planning.

- (1) Preplanning Conference. Potential applicants and/or their consulting engineer shall request and attend a preplanning conference with the Department staff as early in the planning process as practical. During the conference the staff will provide information, advice, instruction, and guidance on the scope of work and level of effort needed to define eligible projects, in order to ensure that the applicant expeditiously complies with the facilities planning requirements dictated by the Act and State regulations. All facilities plans must be prepared by or under the responsible supervision of a professional engineer, registered under Mississippi law.
- (2) Contents of Facilities Plan. All facilities plans must contain that described in the Department's guidance for SRF facilities plans, including all updates, and as may be required by Department staff pursuant to review of the facilities plan. The facilities plan must also be prepared in accordance with Appendices A, B, C, H, I, K, M, and N of this regulation. Should an applicant desire to omit or modify a portion of the facilities plan as required by the Department's guidance for SRF facilities plans, approval by the Department staff must be obtained prior to completion and submission of the facilities plan. The facilities plan must also include a financial capability analysis in accordance with Department guidance. The facilities plan must bear the seal of the registered professional engineer responsible for preparation of this document.
- (3) Environmental Review Process. Prior to approval of the facilities plan, the Department staff will complete the appropriate portions of the environmental review procedure described in Appendix C of this regulation, based upon the

evaluation of environmental impacts of the selected alternative as described in the facilities plan.

- (4) Approval of Facilities Plan. The Department staff will approve the facilities plan after completing the appropriate environmental review procedure and after determining that all facilities planning requirements have been met and are approvable.

B. Engineering Design.

- (1) Predesign Conference. Potential applicants and/or their consulting engineer shall request and attend a predesign conference with Department staff as early in the design process as practical. All plans, specifications and contract documents must be prepared by or under the responsible supervision of a professional engineer registered under Mississippi law.
- (2) Value Engineering.
 - (a) Applicability. The applicant shall conduct value engineering during the design of the project, if the estimated cost of building the treatment works is more than \$5 million. Value engineering for projects of less than \$5 million may be conducted at the discretion of the applicant. Applicants who conduct value engineering may receive an additional design allowance, as described in Appendix B, as a part of the loan award.
 - (b) Guidance. The applicant shall utilize the Department's guidance on the scope and performance of the value engineering analysis.
- (3) Plans, Specifications and Contract Documents.
 - (a) General Requirements. The applicant shall prepare plans, specifications and contract documents on all appropriate elements of the project. These documents shall conform to Department requirements, to Appendices A, C, D, E, F, H, I, K, L, M, and N of this regulation, and to the technical requirements of the Departmental document, "State of Mississippi Requirements for the Design of Municipal Wastewater Treatment Facilities," or its successor. Other recognized engineering publications may be used for unit processes or technologies not described in the "Requirements."

Plans, specifications, and contract documents must also conform to such contract language, conditions, and forms as may be required by Department staff. The plans and specifications shall incorporate the accepted recommendations of any value engineering performed in accordance with this regulation. The plans, specifications, and contract documents must bear the seal of the registered professional engineer responsible for preparation of these documents.

- (b) Contents. The plans, specifications, and contract documents shall contain the following:
- (1) Provisions assuring compliance with these regulations and all relevant federal and state laws.
 - (2) Forms by which the bid bond, performance bond and payment bonds will be provided.
 - (3) Until such time as the State satisfies the Title II funding limitations described in Rule 4.2.G. of this regulation, provisions requiring the successful contractor and subcontractors to pay all laborers and mechanics employed on the project not less than the prevailing wage rates, as determined by the United States Secretary of Labor, in accordance with the federal Davis-Bacon Act (40 U.S.C. 276, et seq.).
 - (4) A contractor's assurance form to be executed by the contractor which shall warrant compliance by the contractor with all applicable federal laws and regulations and all law of the State of Mississippi and all regulations and published policies of the Commission.
 - (5) If determined to be necessary by the applicant, provisions providing for the applicant to retain a certain percentage of the progress payments otherwise due to the contractor until the building of the project is substantially complete, in accordance with state law.
 - (6) Provisions requiring the contractor to obtain and maintain the appropriate insurance coverage.
 - (7) Provisions giving authorized representatives of the Department access to all such construction activities, books, records, documents and other evidence of the contractor for the purpose of inspection, audit and copying during normal business and/or working hours.
 - (8) Provisions for compliance with the MBE/WBE requirements as described in Appendix E of this regulation.
 - (9) Those conditions, specifications and other provisions provided by or required by the Department staff.
- (c) Related Submittals. The following documents, if applicable to the project, must also be submitted prior to, or along with the plans, specifications, and contract documents; or at other times may be required by the Priority System:

- (1) A completed NPDES permit application.
 - (2) A completed Section 404 and/or Section 10 permit application, or a letter from the Corps of Engineers which states that such permits are not needed.
 - (3) A completed solid waste disposal permit application.
 - (4) Approved archaeological/cultural resource surveys, or a letter from the Mississippi Department of Archives and History which states that such surveys are not needed.
 - (5) Approved vegetative/wildlife surveys, or a letter from the Mississippi Natural Heritage Program which states that such surveys are not needed.
- (4) Approval of Plans and Specifications.
- (a) Department Approval. The Department staff will approve the plans, specifications, and contract documents upon determining that these documents:
 - (1) Conform to the requirements listed in this regulation;
 - (2) Are consistent with all relevant federal and state laws;
 - (3) Pass a biddability, operability, and constructability review by the Department staff;
 - (4) Are consistent with the facilities planning documents and environmental determinations required by this regulation; and
 - (5) Are otherwise approvable pursuant to review by the Department staff.

C. Application for SRF Loan.

- (1) Preapplication Conference. Potential applicants and/or their consulting engineer shall request and attend a preapplication conference with Department staff as early in the application process as practical.
- (2) Contents of Application. All documents listed below must be complete and approvable when submitted to the Department staff.

An original and one copy of the SRF loan application shall be submitted to the Department staff. Only forms provided by the Department staff may be used, and they must not be altered. The SRF loan application may request assistance only

for costs that are allowable in accordance with Appendices A and B of this regulation, and may include a construction contingency, as determined by the Department staff, in the project budget. The application amount shall include any administration fee charged to the loan recipient by the Department, as established in the Intended Use Plan under which the project is funded. A complete application shall conform to this regulation, including all Appendices, and shall include the following:

- (a) A completed SRF loan application form.
- (b) A draft user charge system and ordinance. The user charge system shall be designed to produce adequate revenues required for operation, maintenance, replacement, retirement of existing debt and repayments of the State Revolving Fund Loan for the project and shall identify the dedicated source of funds, the basis of payment, and user charges for each user class.
- (c) A draft sewer use ordinance. The sewer use ordinance shall prohibit new connections of inflow sources, shall require that new sewers and connections are properly designed and constructed, shall prohibit combined sewers, shall prohibit the introduction of toxics or other pollutants in amounts or concentrations that endanger public safety or physical integrity of the treatment works, cause violation of effluent or water quality limitations, or preclude the selection of the most cost effective alternative for wastewater treatment and sludge disposal.
- (d) A complete procurement package for all eligible engineering, inspection, architectural, administrative and legal services included in the SRF loan application. Procurement packages for the facilities planning and engineering design are not to be submitted. All procurement actions related to the SRF Loan project shall comply with state law and Appendix D of this regulation, and a certification from the applicant to this effect shall be included in all procurement packages.
- (e) (1) For all loan ineligible real property and easements (including power and other utilities), completion of the appropriate requirements of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, and certification forms from both the loan applicant and the Title Counsel which indicate that all such loan ineligible real property and easements for the entire project have been secured by at least one of the following actions:
 - (a) Clear title
 - (b) Execution by both parties of a bonafide option to purchase or lease.

- (c) Initiation of condemnation by filing such action in court.

Prior to loan award, clear title certification forms from both the loan applicant and the Title Counsel must be submitted for all loan ineligible real property and easements (including poser and other utilities).

- (2) For all loan eligible real property, such as for land treatment projects, completion of the appropriate requirements of the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, and a written request to the Department staff for approval of the purchase price of all such loan eligible real property. Prior to loan award, the applicant must secure approval of the purchase price by the Department staff and must submit and executed bonafide option to purchase.
- (f) A statement of the amount of all necessary local funds for the project and a certification form from the loan applicant which states that all local funds necessary for the project have been secured, or will be secured within 90 days after loan award, and a statement to this effect from the funding source. If local funds will be raised by a local bond issue, a certified copy of the authorizing resolution and an approvable bond issuance schedule may be submitted in lieu of a statement from a funding source.
- (g) A completed financial capability analysis using the most recent design level cost estimates in Rule 4.3.C.(2)(1).
- (h) Completion of the intergovernmental review process as described in Appendix K of this regulation, and the final comment letter from the State Clearinghouse, and all other intergovernmental review agency comments received.
- (i) A certification form from the loan applicant and the loan applicant's legal counsel, stating that (1) the loan applicant has authority under federal and state laws and regulations to receive SRF loan assistance, to collect user charges through an approved user charge system, to enforce the user charge system and sewer use ordinance, to repay the loan under the terms of the loan agreement, to comply with all other terms of the loan agreement, to own, operate, maintain and replace the facilities to be constructed with SRF loan funds, and that (2) there are no restrictions under federal or state laws or regulations regarding indebtedness which may prevent the loan applicant from executing the SRF loan agreement and implementing the project.
- (j) A certified copy of a resolution by the loan applicant's governing body which (1) authorizes the submission of the application, and (2) designates

an authorized representative or office for executing the application and to be the authorized representative on the project.

- (k) A copy of all actual or proposed interlocal agreements related to the project. Such agreements must be executed by all appropriate parties and must be approved by Department staff prior to loan award.
- (l) A copy of the bid forms from the plans and specifications filled out with the consulting engineer's cost estimates. The construction costs shown on the application must match those on the bid forms.
- (m) A certification regarding debarment, suspension and other responsibility matters, in accordance with Appendix F of this regulation.
- (n) All other forms, documents, and supporting information required by the Department staff.

D. Award of SRF Loan

- (1) Upon determination by the Department staff that (a) all applicable requirements of this regulation and applicable state and federal laws have been met, (b) all applicable documents have been approved, (c) all applicable permits have been issued or will be issued, (d) the project is on the fundable portion of the current year priority list and has not been bypassed by the Commission, and (e) funds are available for the amount of the SRF loan application, the Executive Director, or his designee, shall execute and transmit an SRF loan offer (includes an offer letter, loan agreement and initial repayment agreement) to the loan recipient. In addition to the estimated allowable project costs as described in Appendices A and B of this regulation, the loan offer may include a construction contingency, as determined by the Department staff, in the project budget. This contingency may be reduced after receipt of construction bids as described in Rule 4.3.D.5. below.
- (2) Upon receipt of the SRF loan offer, the loan recipient must completely execute and return it to the Department staff, along with a certified copy of a resolution by the loan recipient's governing body authorizing acceptance of the loan offer, within the timeframe established in the SRF loan offer. The loan offer becomes void if not executed and returned within the timeframe specified, unless extended by the Executive Director or his designee.
- (3) Upon return of the executed SRF loan offer to the Department staff, any administration fee established in the loan agreement will be processed accordingly and such fee will be paid to an appropriate Department administration fund.
- (4) Upon return of the executed SRF loan offer to the Department staff, the loan recipient must then advertise the project for construction bids within the timeframe established in the loan agreement. All procurement actions by the loan recipient must comply with state law and Appendix D of this regulation.

- (5) Upon receipt of construction bids, the loan recipient must then submit (a) the completed MBE/WBE documentation as required by Appendix E of this regulation, (b) the completed bid package, and (c) a completed loan agreement amendment request (to reflect as-bid construction costs, a construction contingency as determined by the Department staff, and final allowances) to the Department staff within the timeframes established in the loan agreement.
- (6) Upon receipt of the completed MBE/WBE documentation, bid package and completed loan agreement amendment request from the loan recipient, the Department staff will review these documents, determine whether any request for an increased loan amount is justified, eligible, and that funds are available and, after determining that all documents are approvable, will transmit to the loan recipient an authority to award the construction contracts and an amended SRF loan offer, which includes in the project budget (a) the approved as-bid amounts for construction, (b) the final allowance amounts for facilities planning, engineering design, and construction phase services in accordance with Appendix B of this regulation, and (c) a construction contingency as determined by the Department staff. After execution of the amended SRF loan offer, the SRF loan amount may not be increased except for funding of a subsequent segment of a segmented project as identified in the Intended Use Plan for a later fiscal year. Any increased project costs in excess of the amended SRF loan amount must be paid by the loan recipient from sources other than SRF loan funds.

E. Construction Phase

- (1) Awarding Construction Contracts and Preconstruction Conference. Upon receipt of the authority to award the construction contracts and issue the notice to proceed, the loan recipient must do so and must transmit a copy of the executed construction contracts and the notice to proceed to the Department staff within the timeframe specified in the loan agreement.

The loan recipient shall be responsible for assuring that every appropriate procedure and incidental legal requirement is observed in advertising for bids and awarding the construction contracts. The plans, specifications, and executed contract documents shall not vary from those approved by the Department staff.

The loan recipient shall arrange and hold a preconstruction conference and shall allow attendance and participation by the Department staff.

- (2) Observation During Construction. During all times that construction work is being performed, the loan recipient shall provide for full-time observation of the project by the consulting engineer and shall require the consulting engineer's assurance that the work is being performed in a satisfactory manner in accordance with the SRF loan agreement and the approved plans, specifications and contract documents, approved change orders, and in accordance with sound engineering principles and building practices. Less than full-time observation may be allowed when properly justified and approved by the Department staff.

The Department staff is authorized to observe the building of any project at any time in order to assure that plans, specifications and contract documents are being followed and that the project is being built in accordance with sound engineering principles and building practices. A representative may be stationed at the building site by the Department staff to report on the manner and progress of the building or to report conditions relating to the equipment or materials furnished and the compliance by the contractor with approved plans, specifications and contract documents for the project. Such observation shall not subject the Department to any action for damages or other liability. Such observation will not release the contractor from any requirements of the contract documents or the consulting engineer from determining compliance with the requirements of the contract documents or the loan recipient from insuring compliance with the terms of the loan agreement.

The contractor, consulting engineer and loan recipient shall furnish the Department staff with every reasonable facility for determining whether the work as performed is in accordance with the requirement and intent of the plans, specifications and contract documents. The Department staff is authorized to review and require submission of daily logs, record drawings, field notes, and any other document prepared by any party in relation to the SRF project.

- (3) Observation of Materials and Equipment. The Department staff is also authorized to observe all equipment and materials furnished, including observation of the preparation or manufacture of the equipment and materials to be used.
- (4) Construction Deficiencies
 - (a) In the event construction procedures, materials or equipment are determined by the Department staff to be substandard, otherwise unsatisfactory, and/or not in conformity with approved plans and specifications, the Department staff may order the loan recipient to take such action through the consulting engineer in the manner provided for in the construction contract to correct any such deficiency.
 - (b) The Department staff may immediately begin withholding SRF loan payments should such substandard or unsatisfactory construction work, materials, or equipment become evident and may require the loan recipient to repay any previously paid amounts related to such work, within 30 days of such notification. Interest may be charged on such delinquent repayments after expiration of the 30-day period at the rate established in Rule 4.3.G(6) of this regulation. Alternatively, the Department staff may withhold such amounts from subsequent payment requests.
 - (c) In those instances of dispute between the loan recipient or consulting engineer and the Department staff as to whether material or equipment furnished or work performed conforms with the terms of the construction contract, the Executive Director or his designee may order the loan recipient to reject unsatisfactory construction work, materials or

equipment and/or initiate other action provided for in the construction contract, including suspension of work where necessary, until all disputed issues are resolved in accordance with the terms.

- (d) In addition to normal testing procedures required of the loan recipient, should questions arise concerning the construction work, materials or equipment, the Department staff may require the loan recipient to perform reasonable additional tests of construction materials, equipment or processes which the Department staff determines to be necessary during the construction of the project. All tests, whether for the Department staff or the consulting engineer, shall conform to current American Water Works Association, American Association of State Highway and Transportation Officials, or American Society of Testing and Materials published procedures, or similar criteria. The Department staff shall specify which tests are applicable, if not described in the approved plans, specifications, and contract documents. Samples for testing shall be furnished free of cost, if so requested, to the Department staff upon request on the construction site.
- (5) Change Orders. The loan recipient, consulting engineer and construction contractor shall comply with the EPA publication Management of Construction Change Orders. If after the construction contract has been executed it becomes apparent that changes in such plans, specifications or contract documents are necessary or appropriate, a proposed change order and justification shall be submitted to the Department staff for approval, well in advance of the construction change when possible. Approval of change orders may be secured from the Department either before or after such work is initiated, at the discretion of the loan recipient. The Department staff may identify eligible costs and may approve the change order to the previously approved engineering plans, specifications and contract documents including but not limited to additions or deletions of work to be performed pursuant to the contract. Such change order shall not change, vary or alter the basic purpose or effect of a project, shall be technically adequate, the costs shall be justified and reasonable, and eligible/ineligible costs shall be appropriately separated.

All requests for change order approvals shall contain (a) sufficient information and justification, (b) applicable plans or drawings, (c) construction contractor's cost breakdowns, (d) the consulting engineer's analysis of the cost breakdown, and (e) a memorandum of negotiations to enable the Department staff to review the change order. Engineering computations and sketches shall also be included if necessary to justify the change.

Justification for contract time extensions included in a change order shall be prepared but need not be submitted to the Department unless the total time extensions for the contract exceed 25% of the original contract time, in which case justification for all time extensions shall be submitted to the Department for review and approval. Construction work which occurs after the date representing a 25% time extension to the original contract time is not allowable, unless

approved as such by the Department staff pursuant to review of the justification for all time extensions.

- (6) Contractor Bankruptcy or Default. In the event of a contractor bankruptcy or default, any agreements entered into with the bonding company (other than the bonding company serving as general contractor or fully bonding another contractor acting as their agent) shall be submitted for approval of the Department staff. The loan recipient shall be responsible for assuring that every appropriate procedure and incidental legal requirement is observed in advertising for bids and re-awarding a construction contract, if this course of action is taken.
- (7) Construction Phase Submittals, Approvals, and Actions. The following submittals, approvals and actions will be required during the construction phase of the project. The Department staff may establish other timeframes within the loan agreement when properly justified.
 - (a) Within 90 days after loan award, (1) proof of applicable flood insurance shall be submitted, (2) all construction related contracts shall be advertised for bids and proof of such shall be submitted and (3) all local funds necessary for the project shall be secured and proof of such shall be submitted.
 - (b) Within 14 days after receipt of bids, the loan recipient shall submit all MBE/WBE, EEO and related documents.
 - (c) Within 21 days after receipt of bids, the loan recipient shall submit all bid packages.
 - (d) Within 60 days after receipt of bids, the loan recipient shall execute and submit all construction related contract documents and shall issue and submit a notice to proceed on all such contracts.
 - (e) By the date initially established in the loan agreement (which is based upon approximately 50% of contract time), the loan recipient shall submit for review (1) a completed operation and maintenance manual for all facilities to be constructed in whole or in part with SRF loan funds and (2) a plan of how the loan recipient will insure that operators are hired and certified in accordance with state law by the date in f. below.
 - (f) By the date initially established in the loan agreement (which is based upon approximately 90% of contract time), the loan recipient shall (1) enact the approved user charge system and sewer use ordinance, (2) secure approval of the operation and maintenance manual, (3) hire and operators and (4) submit their names and submit the operator certification numbers for the operators certified in accordance with state law.
 - (g) Within 5 days after construction completion of each construction contract, the loan recipient shall submit a determination of construction completion

and shall request a final construction inspection by the Department staff. The determination of construction completion shall be made by the consulting engineer and the loan recipient. The final construction inspection may be delayed by the Department staff pursuant to review of the loan recipient's request and justification for such delay. Should the Department staff decide that the determination of construction completion and request for final construction inspection are being unreasonably delayed, a final construction inspection may be immediately performed by the Department staff.

- (h) Within 30 days after the final construction inspection performed by the Department staff, the loan recipient shall submit final payment requests, approvable summary change orders for all construction contracts, a complete set of as-built plans for the entire project funded in whole or in part with SRF loan funds, and all other administrative forms and documents required by the loan agreement. Payment requests submitted after this date are not allowable, regardless of when the costs were incurred.
 - (i) Any other submittals or actions required by the loan agreement shall be performed when so required and are subject to review and approval by the Department staff.
- (8) Retainage. The loan recipient may retain progress payments to any party under contract with the loan recipient, consistent with state law. Any such retained amounts may not be requested or paid to the loan recipient from SRF loan funds.

F. Post Construction Phase

- (1) Following final payment of SRF loan funds to the loan recipient, or upon expiration of any deadlines established by the loan agreement or the Department staff, the Department staff or other designated parties may perform an audit of the SRF loan project for the purpose of determining compliance with the SRF loan agreement and to determine final allowable costs, payments made thus far, and any additional payments due the loan recipient or repayments due the State.
- (2) Upon completion of the SRF audit (or, if an audit is not performed, following final payment of SRF loan funds to the loan recipient, or upon expiration of any deadlines established by the loan agreement or the Department Staff), the Department staff will transmit to the loan recipient a copy of the audit and a final determination of allowable costs and payments due the loan recipient or repayments due the State. This final determination will also establish a 30-day appeal deadline, as required by 3. below, and will require repayment of any overpayments with an interest penalty to begin accruing on the appeal deadline. the interest penalty will be as established in Rule 4.3.G.(6) of this regulation.
- (3) Within 30 days after the date of the above final determination, the loan recipient may submit a written appeal the final determination, including a written

justification of the reason for the appeal and supporting documentation for any disputed costs of the final determination; otherwise, the final determination allowable costs will become the final allowable costs for purposes of SRF loan payments and the SRF loan repayment agreement.

- (4) Should an appeal be submitted in accordance with paragraph (3) above, the disputes procedures established in Appendix G of this regulation will be followed in order to resolve the dispute and establish the final allowable costs.
- (5) Upon expiration of the final determination appeal period, or upon resolution of a dispute of the final determination, the Department staff will transmit to the loan recipient a final SRF loan repayment agreement between the loan recipient and the State Tax Commission as established by state law. The loan recipient shall execute and submit to the Department the final loan repayment agreement within the deadline established by the Department.
- (6) Upon receipt of an executed final repayment agreement from the loan recipient, the Department staff will transmit the repayment agreement to the State Tax Commission for execution and return to the Department staff.
- (7) Upon receipt of the executed final repayment agreement from the State Tax Commission, the Department staff will transmit a copy to the loan recipient, and repayment of the SRF loan will commence under the terms of the repayment agreement.
- (8) On the date one year after initiation of operation of the project, which is defined as the date of the final construction inspection performed by Department staff, the loan recipient shall submit a certification that the project meets all of the project performance standards, in accordance with the SRF loan agreement and department requirements. If the loan recipient cannot certify that all project performance standards are being met, a negative certification shall be submitted on this date along with a corrective action report and an approvable schedule for meeting the project performance standards. All certifications shall be submitted on forms established by the Department staff. Failure to submit such certifications or to implement corrective actions in a timely manner may result in the Department staff determining all or a portion of the loan award unallowable and requiring repayment of such unallowable amounts within 30 days of such determination.

G. Payments to SRF Loan Recipients. Payments from the SRF may be made to SRF loan recipients under the following conditions:

- (1) Payments may be requested by and may be made only to loan recipient, in accordance with the SRF loan agreement and the loan recipient's contracts for services and construction for work performed within the project scope and budget period, unless specifically allowed other by the SRF loan agreement.
- (2) Payments may be requested and paid no more often than on a monthly basis.

- (3) The loan recipient shall deduct from all SRF payment requests the amount of funds provided or to be provided from all other state and federal agency funding sources for allowable SRF project costs.
- (4) Payment requests shall be submitted by the loan recipient to the Department staff and shall include the following:
 - (a) SRF payment request form
 - (b) Invoices for all allowable costs for which payment is requested, except that invoices need not be submitted for payment of the facilities planning and design allowance, as determined by Appendix B of this regulation and need not be submitted for any administrative fee included in the loan agreement.
 - (c) Any other documents required by the loan agreement.
- (5) The timing of SRF payments will be as follows, provided the loan recipient is in compliance with the requirements of this regulation and all provisions of the SRF loan agreement:
 - (a) Upon execution of the SRF loan agreement, 50% of the estimated facilities planning and design allowance, as determined by Appendix B of this regulation, may be requested and paid.
 - (b) Upon execution and submittal of all construction contracts within the project scope and upon issuance and submittal of the notice to proceed on all such contracts, the remainder of the final facilities planning and design allowance may be requested and paid.
 - (c) Payments for the construction phase services allowance, as determined by Appendix B of this regulation, may be requested and paid based upon incurred allowable costs. Such requested payment amounts are subject to verification by the Department staff. No more than 85% of the total construction phase services allowance will be paid pending submission of the determination of construction completion, performance of the final construction inspection by department staff, submission of the final pay request, submission of approvable summary change orders on all construction contracts, submission of as-built plans on all construction contracts, and compliance with all other applicable provisions of the SRF loan agreement. Upon completion of these actions, the remainder of the construction phase services allowance may be requested and paid.
 - (d) Payments for allowable construction work may be requested and paid based upon in-place work or delivered materials and equipment as specified in the construction contract, and as supported by invoices and verified as accurate by the consulting engineer and the loan recipient, less

any retainage. Such requested payment amounts are subject to verification by the Department staff.

- (e) Payments for eligible land may be requested and paid immediately after loan agreement execution, provided the Department has approved the purchase price and provided the loan recipient has submitted a bonafide option to purchase within 30 days after purchase of the loan eligible real property, clear title certification forms from both the loan recipient and the title counsel shall be submitted to the Department.,
- (6) Any payments made to the loan recipient which are at any time determined by Department staff to be for costs not in accordance with the SRF loan agreement, for ineligible or unallowable costs, or for related to waste, fraud, abuse or illegal acts under state or federal law, shall be repaid to the SRF fund with 30 days of such notification by the Department staff. Interest may be charged on such delinquent repayments after expiration of the 30-day period at a rate of ten (10) percent per annum, compounded monthly. Alternatively, the Department staff may withhold such amounts from subsequent payment requests.

H. SRF Loan Repayment Requirements. All SRF loan repayment agreements will be processed under the following requirements:

- (1) Interest on paid amounts will commence on the original construction contract completion date.
- (2) The amount of interest accrued between the original construction contract completion date and the initiation of the repayment process will be added to the final allowable project costs to determine the principal amount to be repaid by the loan recipient.
- (3) The term of the loan will be from the time of transmittal of the final loan repayment agreement to the loan recipient to the date 20 years after project completion. Project completion is defined as the date of the final construction inspection by the Department staff.
- (4) Repayments are to be made on a monthly basis through state sales tax withholding or submission of monthly payments in accordance with state law and shall commence no sooner than 90 days after and no later than one year after the final construction inspection by the Department staff.
- (5) The repayment interest rate and frequency of interest compounding will be established in SRF loan agreement and repayment agreement.
- (6) Should a loan recipient desire to prepay the SRF loan prior to expiration of the repayment period, the remaining principal to be repaid will be calculated assuming all previous repayments included a fixed principal amount equal to the total loan amount divided by the number of repayments in the repayment agreement.

Source: *Miss. Code Ann.*, §§ 49-17-61 through 49-17-70, 49-17-81 through 49-17-89, 49-2-1, *et seq.*, and 49-17-1, *et seq.*

APPENDIX A

Determination of Eligible and Allowable Costs

Eligible and allowable costs under SRF loan agreements will be as described in the EPA publication Handbook of Procedures, Chapter IX, with the following exceptions:

1. Federal procurement requirements do not apply. State law applies as further described in Appendix D of this regulation.
2. Reserve capacity within the design period (up to 20 years) is an eligible cost. Reserve capacity for interceptors, pumping stations, and force mains within a design period of up to 40 years is an eligible cost.
3. On wastewater collection projects which provide sewers to unsewered residences, public buildings and businesses, the service line between the public sewer and the point five (5) feet from the outside wall of residences and public buildings are eligible. Service lines for businesses are eligible between the public sewer and the property line of the business.
4. Construction work and construction related work which occurs by the date representing a 25% time extension to the original construction contract time is eligible. Construction work and construction related work which occurs after this date is eligible only to the extent approved by the Department staff pursuant to a review of the justification for all time extensions.
5. Costs for facilities planning and design are allowable up to the amount of the allowance determined by Appendix B, Table 1 of this regulation. Costs for construction phase services are allowable up to the amount of the allowance determined by Appendix B, Table 2 of this regulation, and as supported by invoices for costs incurred in accordance with the contracts for such services and to the extent such services are allocable to the SRF project.
6. On sewer system rehabilitation projects, the rehabilitation of service lines for residences and public buildings is eligible between the public sewer and the point five (5) feet from the outside wall of residences and public buildings. Such rehabilitation on service lines for businesses is eligible between the public sewer and the property line of the business.
7. Eligible costs include costs for the implementation of a non-point source management program established under Section 319 of the Act, and for development and implementation of an estuary conservation and management plan under Section 320 of the Act. Eligible and allowable costs will be determined in accordance with this Appendix.
8. Eligible costs include the costs of planning, design and construction of publicly owned and operated wastewater treatment and transportation facilities for the

purpose of serving industrial users. Eligible and allowable costs will be determined in accordance with this Appendix.

9. Eligible costs include the costs of planning, design, and construction of treatment and transportation facilities for control of pollutant discharges from a separate or combined storm sewer system. Eligible and allowable costs will be determined in accordance with this Appendix.
10. Eligible costs will be determined without regard to any previous EPA grant or SRF loan funding provided for facilities to be replaced, upgraded, or rehabilitated, except as described in Rule 4.2.I(1)(g).
11. Eligible costs include any administration fee charged to the loan recipient by the Department, as established in the Intended Use Plan under which the project is funded.

APPENDIX B

Allowance for Facilities Planning, Design and Construction Phase Services

The allowance for facilities planning and design will be determined using Table 1 of this Appendix. Projects for which the loan recipient must acquire easements or real property in accordance with the federal Uniform Relocation and Real Property Acquisition Policies Act may receive an additional 1% above the percentages shown in Table 1 for the planning and design allowance. Projects for which a value engineering study is conducted may receive an additional 1% above the percentages shown in Table 1 for the planning and design allowance.

The allowance for construction phase services (includes costs for construction engineering, resident observation, project administration, legal work, and all other costs for work, other than construction, performed in relation to the project) will be determined using Table 2 of this Appendix.

The estimated and final allowances will be determined in accordance with this Appendix and Tables 1 and 2. All allowance percentages will be calculated to four decimal places using linear interpolation. The amount of the allowance is computed by applying the resulting allowance percentage to the initial allowable building cost. The initial allowable building cost is the initial allowable cost of erecting, altering, remodeling, improving, or extending a treatment works, whether accomplished through subagreement or force account. Specifically, the initial allowable building cost is the allowable cost of the following:

- a. The initial award amount of all prime subagreements for building the project.
- b. The initial amounts approved for force account work performed in lieu of awarding a subagreement for building the project.
- c. The purchase price of eligible real property.

The estimated allowances are to be based on the estimate of the initial allowable building cost. The final allowances will be determined one time only for each project, based on the initial allowable building cost, and will not be adjusted for subsequent cost increases or decreases.

The allowance Tables are not intended to be used to determine the compensation for facilities planning services, design services, or construction phase services. Compensation for these services should be based upon the nature, scope, and complexity of the services required by the community. The actual compensation justified for a particular project may be more or less than the amount of the allowance for these services.

Following execution of the SRF loan agreement, the loan recipient may request and receive payment for the facilities planning and design allowance and the construction phase services allowance in accordance with the procedures described in Rule 4.3.G. of this regulation. Advances of allowances will not be provided.

Table 1

Allowance for Facilities Planning and Design

<u>Allowable Building Cost</u>	<u>Allowance as a Percentage of Building Cost</u>
\$ 100,000 or less	14.4945%
\$ 120,000	14.1146%
\$ 150,000	13.6631%
\$ 175,000	13.3597%
\$ 200,000	13.1023%
\$ 250,000	12.6832%
\$ 300,000	12.3507%
\$ 350,000	12.0764%
\$ 400,000	11.8438%
\$ 500,000	11.4649%
\$ 600,000	11.1644%
\$ 700,000	10.9165%
\$ 800,000	10.7062%
\$ 900,000	10.5240%
\$ 1,000,000	10.3637%
\$ 1,200,000	10.0920%
\$ 1,500,000	9.7692%
\$ 1,750,000	9.5523%
\$ 2,000,000	9.3682%
\$ 2,500,000	9.0686%
\$ 3,000,000	8.8309%
\$ 3,500,000	8.6348%
\$ 4,000,000	8.4684%
\$ 5,000,000	8.1975%
\$ 6,000,000	7.9827%
\$ 7,000,000	7.8054%
\$ 8,000,000	7.6550%
\$ 9,000,000	7.5248%
\$10,000,000	7.4101%
\$12,000,000	7.2159%
\$15,000,000	6.9851%
\$17,500,000	6.8300%
\$20,000,000 or more	6.6984%

Table 2

Allowance for Construction Phase Services

<u>Allowable Building Cost</u>	<u>Allowance as a Percentage of Building Cost</u>
\$ 100,000 or less	23.0000%
\$ 200,000	19.5000%
\$ 300,000	17.5000%
\$ 400,000	16.0000%
\$ 500,000	14.8000%
\$ 600,000	14.0000%
\$ 700,000	13.3000%
\$ 800,000	12.7000%
\$ 900,000	12.1000%
\$ 1,000,000	11.7000%
\$ 1,250,000	10.8000%
\$ 1,500,000	10.1000%
\$ 1,750,000	9.7000%
\$ 2,000,000	9.5000%
\$ 2,500,000	9.1000%
\$ 3,000,000	8.9000%
\$ 3,500,000	8.8000%
\$ 4,000,000	8.6000%
\$ 5,000,000	8.3000%
\$ 6,000,000	8.1000%
\$ 7,000,000	7.9000%
\$ 8,000,000	7.8000%
\$ 9,000,000	7.7000%
\$10,000,000	7.6000%
\$20,000,000 or more	6.6000%

APPENDIX C

Environmental Review Process

Introduction

Each project which receives SRF funding will undergo a review to determine whether there will be any significant adverse environmental impacts. It should be recognized that wastewater treatment projects nearly always have a substantial beneficial impact.

For any project, one or more of the following environmental actions will be taken by the Department:

- a. Categorical Exclusion
- b. Finding Of No Significant Impact on the Environment
- c. Amendment to a Finding of No Significant Impact on the Environment
- d. Environmental Impact Statement
- e. Reaffirmation of an Environmental Action
- f. No Action

Categorical Exclusion

A project will receive categorical exclusion (CE) from environmental review if it meets all of the following criteria:

- a. The project will not create a new discharge or result in a significant relocation of an existing discharge.
- b. The project will not substantially increase the volume of discharge or load of pollutants to the receiving stream.
- c. The project will not have a significant adverse effect on the environment.
- d. The action will not adversely affect cultural resources, habitats of endangered or threatened species, or environmentally important natural resource areas.
- e. The action is cost effective and should cause no significant public controversy.

It is expected that most projects which include only sewer system rehabilitation will receive a CE.

The CE will be issued to the appropriate contact agencies and will be published in the Jackson Clarion-Ledger and an appropriate local newspaper. See Attachment 1.

The Department will generally wait 30 days after issuing a CE before funding a project. However, funding may be awarded immediately after issuing a CE, if necessary.

The Department may revoke a CE at any time if significant adverse information becomes available.

Finding of No Significant Impact on the Environment

If a project will not have any significant adverse environmental impact but does not qualify for a CE, a finding of no significant impact (FONSI) will be issued, along with an environmental assessment (EA). See Attachments 2 and 3.

The emphasis of the EA will be to summarize the need for the project (i.e., why the "no action" alternative is not acceptable) and to discuss the environmental impacts of the chosen alternative. The EA is not intended to be a summary of the facilities plan. The EA will not include a list of items eligible for funding.

All alternatives that were studied will be listed, but only the no action alternative and the chosen alternative will be described in detail. The reasons for choosing the chosen alternative will be discussed.

The FONSI will be issued to the appropriate contact agencies and will be published in the Jackson Clarion-Ledger and an appropriate local newspaper. See Attachment 2.

The Department will generally wait 30 days after issuing a FONSI before funding a project. However, a facilities plan may be conditionally approved and a loan agreement may be conditionally offered immediately after issuing the FONSI, if necessary. In such a case, no funds will be transferred to the loan recipient and authority to award construction contracts will not be given until the 30 day period has expired and all substantial adverse comments have been addressed. There will be no exceptions.

Amendment to a Finding of No Significant Impact on the Environment

FONSI amendments are occasionally needed to describe changes to proposed facilities that have already been described in a FONSI. Attachment 2 shows the amendment format. The EA that accompanies the amendment will describe the changes, the reasons for the changes, and any new impacts on the environment due to the changes. The EA amendment is intended to be read in conjunction with the original EA and is not a self supporting document. The original EA will be reissued with the EA amendment in those cases where it is deemed to be necessary to assure clarity.

The 30 day period requirement will be the same as for a FONSI.

Environmental Impact Statement

If the Department determines that an environmental impact statement (EIS) is needed, it will be prepared in accordance with EPA regulation 40 CFR Part 6.

Reaffirmation of an Environmental Action

If five years will have passed between the issuance of a CE, FONSI, Amendment to a FONSI, or an EIS and the award of SRF funding, the environmental impact of the project will be reevaluated.

If there have been no significant changes, the Department will issue a reaffirmation of the environmental action. See Attachment 4. The 30 day period requirement will be the same as for a CE.

If the original environmental action cannot be reaffirmed, the Department will issue a FONSI or an Amendment, as appropriate. The 30 day period requirement will be the same as for a FONSI.

A reaffirmation will not be required when a FONSI is over five years old but the most recent Amendment is less than five years old.

No Action

All SRF projects will receive a CE, FONSI, or EIS. If one of those documents has been issued and there are then significant changes in the project, those changes will be described in an Amendment. Some changes are minor, however, and the Department may determine that a separate Amendment will not be needed. Such changes include, but are not limited to:

- a. Addition of sewer system rehabilitation.
- b. Changes in the size of pump stations, interceptors, or collectors.
- c. Minor changes in the size of unit processes.
- d. Minor rerouting of sewer lines when the new route i) will be mostly on public property, and ii) will not adversely affect cultural resources, habitats of endangered or threatened species, or environmentally important natural resource areas. All affected property owners must be notified by the loan recipient.
- e. Changes in the average monthly user charge.

Public Participation

A loan recipient will be encouraged to hold a public hearing when the alternatives have been determined but before a chosen alternative has been selected and will be required to hold a public hearing before the facilities plan has been fully adopted. The hearings shall be advertised in the Jackson Clarion-Ledger and an appropriate local newspaper at least 30 days before the hearing. The recipient is also encouraged to notify local television and radio stations.

Topics to be discussed at the hearing include the facilities to be built, why they are needed, where they will be built, how much they will cost, the average monthly user charge, and the environmental impact.

If a project change is significant enough to require a FONSI amendment, a new public hearing will be required.

The recipient shall notify the public if the average monthly user charge will be substantially greater (about 20% or more) than was presented at the public hearing. Notification may be made in the newspaper or by a new public hearing.

Contact Agencies

Copies of all environmental actions will be sent to the appropriate contact agencies listed in Attachment 3; other agencies will be contacted as needed. Comments from those agencies and from the public will be carefully evaluated before finalizing any environmental action.

Resolution of Adverse Comments

Adverse comments received as a result of the environmental review process will be addressed in the following manner:

- a. The Department staff will first require the loan recipient to resolve the adverse comments, subject to Department staff approval.
- b. If the loan recipient is unable to resolve the adverse comments and secure approval, the Department staff will render a decision concerning the adverse comments.
- c. Should the loan recipient or the party which originally made the adverse comments desire to appeal the above decision, a request for an informal hearing must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Head of the Office of Pollution Control, and the affected parties. The Office Head, or his designee, will render a decision on the appeal as a result of the informal hearing.
- d. Should the loan recipient or the party which originally made the adverse comments desire to appeal the above informal hearing decision, a request for a formal hearing by the Department of Environmental Quality must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission on Environmental Quality will hold a formal hearing to consider the matter, and will render a decision.
- e. Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

CATEGORICAL EXCLUSION FROM ENVIRONMENTAL REVIEW

(1) Recipient, Loan Number

(2) Date

All projects funded under the Mississippi Water Pollution Control Revolving Fund Act undergo a review to determine whether the proposed project will have a significant impact on the environment. In making this determination, it is assumed that all of the facilities and actions recommended in the facilities plan will be implemented.

The proposed project includes: *(3) new collectors, new interceptors, sewer system rehabilitation, upgrading or expanding the existing treatment plant facilities.

The Mississippi Office of Pollution Control has determined that the proposed project meets the criteria for receiving a categorical exclusion from further environmental review. However, this determination can be revoked if significant adverse information becomes available. If you have any comments regarding the proposed project, please send them to Mr. Mark Smith, Office of Pollution Control, P.O. Box 2261, Jackson, MS 39225, phone (601) 961-5171 no later than (4) date.

Sincerely,

Charles H. Chisolm
Office Head

Note: *(3) - Include as needed.

FINDING OF NO SIGNIFICANT IMPACT ON THE ENVIRONMENT
*(1) AMENDMENT

(2) Recipient, Loan Number

(3) Date

All projects funded under the Mississippi Water Pollution Control Revolving Fund Act undergo a review to determine whether the proposed project will have a significant impact on the environment. In making this determination, it is assumed that all of the facilities and actions recommended in the facilities plan will be implemented.

The proposed project includes: *(4) new collectors, new interceptors, sewer system rehabilitation, upgrading or expanding the existing treatment facilities, building new treatment facilities.

The Mississippi Office of Pollution Control has determined that the proposed project will not have a significant adverse impact on the environment and consequently is issuing this finding of no significant impact. However, this issuance can be revoked if significant adverse information becomes available. An environmental assessment is available on request. If you have any comments regarding the proposed project, please send them to Mr. Mark Smith, Office of Pollution Control, P.O. Box 2261, Jackson, MS 39225, phone (601) 961-5171 no later than (5) date.

Sincerely,

Charles H. Chisolm
Office Head

Note: *1 - Include if needed.
*4 - Include as needed.

ENVIRONMENTAL ASSESSMENT

Recipient , Loan Number

A. Summary Data

1. Facilities to be Built
New collectors, new interceptors, sewer system rehabilitation, upgrading or expanding existing treatment plant, building new treatment plant
2. Population and Flow

	Current (19)	Design (20)
Population in planning area		
Other pop. equivalent (specify)		
Total equivalent population		
Domestic wastewater flow, mgd		
Industrial wastewater flow, mgd		
I/I, mgd		
Other flow (specify), mgd		
Total flow, mgd		
3. Project Costs
Total project cost: \$
Loan eligible cost: \$
4. Funding Sources
SRF loan amount: \$
Monthly payment on SRF loan: \$
Other sources (specify): \$
Other monthly payments: \$
Total monthly payments: \$
5. User Charges
Average monthly user charge, based on gallons per month:
\$ for debt retirement
\$ for OM&R
\$ total
Median annual household income: \$
Average annual user charge will be % of median income
6. NPDES Effluent Limits

	<u>Summer</u>	Winter
Flow, mgd		
BOD5, mg/l		
NH3-N, mg/l		

DO, mg/l
Residual Cl₂, mg/l
SS, mg/l
FC, number/100 ml
Receiving stream:

B. Maps

Include a map or maps showing the location of the existing and proposed WWTP and major interceptors. Maps showing the location of individual collection lines will not usually be included. A schematic diagram of the WWTP will be included only if a narrative description of the unit processes will not give an accurate picture of the facilities to be built.

C. Existing Facilities

Describe the existing collection and treatment facilities. Describe the loadings on the unit processes if the information is pertinent to the need for the proposed project.

D. Need for the Project

Explain why the existing facilities will not be able to protect human health or the environment at future design flow and loading when the facilities are operated according to optimum O & M procedures.

In many cases the NPDES effluent limits will have been changed from secondary to tertiary limits. For example, if a town has an existing lagoon and the new limit requires a BOD of less than 30 mg/l, a simple statement that a lagoon cannot be expected to meet the new limit will establish a need.

A letter from the Mississippi State Department of Health stating that an area has a significant number of failing septic tank systems and further stating that septic tank systems cannot be expected to work because of small lot sizes or low soil permeability will establish a need.

E. Analysis of Alternatives

Discuss why the no action alternative was not chosen. List, but do not discuss, all of the other alternatives that were studied. State which alternative was chosen. Describe why it was chosen. In many cases a simple statement that the chosen alternative has the lowest present worth, will meet the effluent limits, and is environmentally sound will be adequate.

F. Proposed Facilities

List the unit processes that will be used for wastewater and sludge treatment and describe any that are unusual. State the design flow.

State the number of lift stations and the approximate total length of the interceptors and collectors. State what areas of town, if any, will receive new collectors or sewer system rehabilitation. State what kind of collection system will be used: conventional gravity, small diameter gravity, pressure, etc.

State what will be done with the existing facilities.

State that the above sizes and quantities are planning level estimates and are subject to change during project design.

G. Impact of the Chosen Alternative on the Environment

Describe the impacts of the proposed alternative on the following items:

1. Land use practices and population growth
2. Surface water quality
3. Groundwater quality
4. Wetlands, wildlife preserves, prime agricultural lands, other environments of special interest
5. Any other significant beneficial or adverse impacts

The environmental assessment will state that short term dust, noise, and erosion occurring during construction will be minimized by using appropriate construction techniques. The environmental assessment will also state that all wastewater facilities occasionally produce objectionable odors, but that the facilities will be operated to minimize the occurrences of odor problems. For many projects, these will be the only adverse environmental impacts.

Describe any actions that must be taken to mitigate other adverse impacts on the environment. State when the actions must be accomplished, if appropriate. Describe any actions that have already been taken by the time of FONSI issuance, if appropriate.

H. Public Participation and Agencies Consulted

Summarize the public hearing, emphasizing any public approvals or objections. List the public agencies consulted about the project. The following agencies will be consulted on most projects:

1. United States Army Corps of Engineers
2. United States Soil Conservation Service
3. Mississippi State Department of Health
4. Mississippi Department of Wildlife Conservation

5. Mississippi Department of Archives and History
6. Mississippi Department of Finance and Administration
(State Clearinghouse)

State that the Environmental Assessment was prepared by the Department based on information in the SRF facilities plan as prepared by the loan recipient.

REAFFIRMATION OF ENVIRONMENTAL ACTION

(1) Recipient, Loan Number

(2) Date

All projects funded under the Mississippi Water Pollution Control Revolving Fund Act undergo a review to determine whether the proposed project will have a significant impact on the environment. In making this determination, it is assumed that all of the facilities and actions recommended in the facilities plan will be implemented.

The proposed project includes: *(3) new collectors, new interceptors, sewer system rehabilitation, upgrading or expanding the existing treatment facilities, building new treatment facilities.

The Mississippi Office of Pollution Control has reaffirmed the *(4) finding of no significant impact on the environment/categorical exclusion from further environmental review that was originally issued on (5) date. However, this reaffirmation can be revoked if significant adverse information becomes available. If you have any comments regarding the proposed project, please send them to Mr. Mark Smith, Office of Pollution Control, P.O. Box 2261, Jackson, MS 39225, phone (601) 961-5171 no later than (6) date.

Sincerely,

Charle H. Chisolm
Office Head

Note: *(3) - Include as needed.

*(4) - Choose one.

APPENDIX D

Procurement Requirements for SRF Loan Recipients

In the procurement of all construction, equipment, material, supplies, professional services and non-professional services and all other costs related to the SRF project, all loan recipients shall comply with all applicable sections of the Mississippi Code of 1972, Annotated.

If funds will be received from other agencies, the loan recipient shall review that agency's procurement requirements and follow whichever is more stringent.

The procurement and conduct of all professional engineering and land surveying services shall be in accordance with the Code of Conduct and other guidance and interpretations established by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

The procurement of all construction contracts shall be in accordance with the rules and regulations of the State Board of Contractors and other guidance and interpretations established by the Mississippi State Board of Contractors.

All loan recipients shall submit a procurement certification, as required by the Department staff, indicating that all of the above referenced requirements have been met. Should it be determined that any of the procurement requirements are violated, the Department may determine that the related costs are unallowable and may require repayment of all SRF Loan funds paid for such costs, in accordance with Rule 4.3.G.(6). of the SRF regulations.

APPENDIX E

SRF Minority and Women's Business Enterprise Requirements (MBE/WBE)

EPA has determined that requirements for the participation of minority and women owned businesses will apply to SRF assistance in an amount equal to the state capitalization grants. To attain compliance with MBE/WBE requirements, the State and EPA shall negotiate an overall "fair share" objective for MBE/WBE participation on the SRF funded activities. A fair share objective should be based on the amount of the state capitalization grant award or other state established goals or standards. This fair share objective will be accomplished by requiring all such projects funded with SRF assistance to undertake the six affirmative steps described in federal regulation 40 CFR, Part 33.240.

For convenience, this federal regulation is included below as a part of Appendix E:

Section 33.240: Small, minority, women's, and labor surplus area businesses.

- (a) It is EPA policy to award a fair share of subagreements to small, minority, and women's businesses. The recipient must take affirmative steps to assure that small, minority, and women's businesses are used when possible as sources of supplies, construction and services. Affirmative steps shall include the following:
 - (1) Including qualified small, minority, and women's businesses on solicitation lists;
 - (2) Assuring that small, minority, and women's businesses are solicited whenever they are potential sources;
 - (3) Dividing total requirements, when economically feasible, into small tasks or quantities to permit maximum participation of small, minority, and women's businesses;
 - (4) Establishing delivery schedules, where the requirements of the work permit, which will encourage participation by small, minority, and women's businesses;
 - (5) Using the services and assistance of the Small Business Administration and the Office of Minority Business Enterprise of the U.S. Department of Commerce, as appropriate; and
 - (6) If the contractor awards subagreements, requiring the contractor to take the affirmative steps in paragraphs (a)(1) through (5) of this Rule.
- (b) {Reserved}

- (c) EPA encourages recipients to procure supplies and services from labor surplus area firms.

Minority and women's business enterprises must comply with the definitions contained in federal regulation 40 CFR, Part 33.005.

APPENDIX F

Debarment and Suspension

SRF loan recipients are prohibited from entering into contractual agreements with individuals or organizations that have been debarred or suspended by the Environmental Protection Agency, any other federal or state agency, or by the Department. Individuals and/or businesses that have been debarred or suspended are identified in the General Services Administration (GSA) publication entitled "List of Parties Excluded from Federal Procurement or Nonprocurement Program." This list, along with information concerning debarment and suspension actions by the State, is available from the Office of Pollution Control.

The loan recipient is responsible for ensuring that the prime contractor utilized on the project is not on the federal or state debarment lists. Likewise, the prime contractor is responsible for ensuring that the subcontractors utilized on the project are not on the federal or state debarment lists.

Anyone may contact the Executive Director concerning the existence of a cause for debarment or suspension. The Executive Director may refer the matter to the State Attorney General or other appropriate office for further investigation. If, after review or investigation, the Executive Director reasonably believes that a cause for debarment exists, the Executive Director may propose debarment or suspension and may initiate procedures similar to, but not necessarily identical to, federal regulation 40 CFR, Part 32: Debarment and Suspension Under EPA Assistance Programs.

Such above described debarment or suspension actions shall not affect existing executed contractual agreements, unless such agreements have been terminated or suspended under the terms of the agreement by the loan recipient.

APPENDIX G

SRF Disputes Procedures

Only SRF loan recipients may submit a notice of dispute (disagreement) with a decision made by the Department, with the exception of that allowed by the resolution of adverse comments procedures included within the environmental review process of Appendix C. The following procedures will be used to resolve disputes between the loan recipient and the Department:

- a. The loan recipient must submit a written notice of dispute with a Department decision, including a summary of the dispute and reasons for why the loan recipient believes the Department decision should be reversed.
- b. The Department staff will then render a written decision on the dispute and will include reasons for the decision.
- c. Should the loan recipient desire to appeal the Department staff decision, a request for an informal hearing must be received by the Department within 30 days after the date of the Department staff decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Head of the Office of Pollution Control, and the affected parties. The Office Head, or his designee, will render a decision on the appeal as a result of the informal hearing.
- d. Should the loan recipient desire to appeal the above informal hearing decision, a request for a formal hearing before the Commission on Environmental Quality must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission on Environmental Quality will hold a formal hearing to consider the matter, and will render a decision.
- e. Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

APPENDIX H

Cross-Cutting Federal Laws and Authorities

A number of other federal laws and authorities that are not included in the list of federal Title II requirements outlined in Section II.G. of this regulation also apply to projects and activities funded by funds directly made available by capitalization grants to the state. These other federal laws and authorities apply by virtue of their own authority and are referred to as cross-cutting federal laws and authorities and are listed below:

Environmental:

- Archeological and Historic Preservation Act of 1974, PL 93-291
- Clean Air Act, 42 U.S.C. 7506(c)
- Coastal Barrier Resources Act, 16 U.S.C. 3501 et seq..
- Coastal Zone Management Act of 1972, PL 92-583, as amended
- Endangered Species Act 16 U.S.C. 1531, et seq..
- Executive Order 11593, Protection and Enhancement of the Cultural Environment
- Executive Order 11988, Floodplain Management
- Executive Order 11990, Protection of Wetlands
- Farmland Protection Policy Act, 7 U.S.C. 4201 et seq..
- Fish and Wildlife Coordination Act, PL 85-624, as amended
- National Historic Preservation Act of 1966, PL 89-665, as amended
- Safe Drinking Water Act, Section 1424 (e), PL 92-523, as amended
- Wild and Scenic Rivers Act, PL 90-542, as amended
- Historic Sites Act of 1935, PL 74-292

Economic:

- Davis-Bacon Act and Associated Labor Laws
- Demonstration Cities and Metropolitan Development Act of 1966, PL 89-754, as amended

- Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, including Executive Order 11738, Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans

Social Legislation:

- Age Discrimination Act, PL 94-135
- Civil Rights Act of 1964, PL 88-352
- Section 13 of PL 92-500; Prohibition against sex discrimination under the Federal Water Pollution Control Act
- Executive Order 11246, Equal Employment Opportunity
- Executive Orders 11625 and 12138, Women's and Minority Business Enterprise
- Rehabilitation Act of 1973, PL 93-112 (including Executive Orders 11914 and 11250)

Miscellaneous Authority:

- Uniform Relocation and Real Property Acquisition Policies Act of 1970, PL 91-646
- Executive Order 12549 - Debarment and Suspension
 - Tax Reform Act of 1986

APPENDIX I

Waste, Fraud, and Abuse

It is the loan recipient's responsibility for preventing, detecting, and prosecuting waste, fraud, abuse, and all other corrupt practices which occur in relation to the SRF loan project.

If the loan recipient becomes aware of allegations, evidence, or the appearance of corrupt practices, the loan recipient must:

- a. Immediately inform the Department in writing.
- b. Promptly pursue available state and local legal, administrative, and contractual remedies.

The Department may disallow costs under the SRF loan agreement where it is determined that such costs are related to waste, fraud, abuse or other corrupt practices. The Department may also require repayment of SRF loan funds paid for such costs in accordance with Rule 4.3.G.(6) of this regulation.

APPENDIX J

SRF Loan Recipient Accounting and Auditing Procedures

All SRF loan recipients must maintain project accounts in accordance with generally accepted government accounting standards, as defined by the Guidelines of the Municipal Accounting and Audit Manual, as prescribed by the State Auditor's Office. Charges to the project account must be properly supported, related to eligible construction costs, and documented by appropriate records. These project accounts must be maintained as separate accounts.

APPENDIX K

Intergovernmental Review Process

The following outlines the Department's requirements for compliance with the Intergovernmental Review Process for State Revolving Fund Loan Program projects in Mississippi. These actions and deadlines are consistent with that required by the Priority System. The intergovernmental review agencies are as follows:

1. Department of Archives and History (For Archaeological/Cultural Review)
 2. Natural Heritage Program (For Vegetative/Wildlife Review)
 3. Army Corps of Engineers, Regulatory Functions Branch (For Wetlands and Section 10 Review)
 4. Bureau of Marine Resources (Jackson, Harrison, and Hancock County Projects Only; for Coastal Barriers Resources Act Review)
- U. S. Fish and Wildlife Service (Jackson, Harrison, and Hancock County Projects only; for Coastal Barriers Resources Act Review)

Addresses of these agencies are attached.

Facilities Planning

During preparation of the draft facilities plan, the appropriate intergovernmental review agencies should be consulted about the proposed project area concerning the existence of any known or possible archaeological/cultural sites, endangered vegetation/wildlife, wetlands, shellfish/coastal program impacts, or coastal barriers resources impact, with their input addressed in the draft facilities plan. If feasible, the project should avoid negative impacts on areas for which a concern has been expressed by an intergovernmental review agency. If not feasible to avoid negative impacts on these areas, the appropriate intergovernmental review agency should be consulted concerning the probability of obtaining clearance to construct the selected plan. Where an agency expresses substantial concern that clearance of the selected plan may not be obtained, appropriate modification, mitigation, and/or other sites should be pursued in coordination with the Department and the appropriate agency prior to submission of the draft facilities plan. This effort should avoid completion of a draft facilities plan which may not later receive intergovernmental review clearance. However, it should be recognized that subsequent surveys, applications, or other information may result in further intergovernmental review agency concerns which must be addressed prior to clearance.

By the deadline for the draft facilities plan to be submitted to the Department of Environmental Quality, the draft facilities plan shall also be submitted to the appropriate intergovernmental review agencies with a request for written comments and a determination on the need for

archaeological/cultural surveys, vegetative/wildlife surveys, Section 404/Section 10 Permits, Bureau of Marine Resources Permits, or other actions. The draft facilities plan or the transmittal letter shall include a map showing the proposed construction and the land use (i.e. residential, commercial, industrial, farmland, pasture, wooded, wetlands, or other) in the areas of construction. It is strongly suggested that photographs of the areas of construction also be included in order to expedite these determinations. The Department of Environmental Quality must be copied on the transmittal letters (including all attached maps, photographs, etc.) to all intergovernmental review agencies. These agencies should provide written comments and a determination on the need for archaeological/cultural surveys, vegetative/wildlife surveys, Section 404/Section 10 Permits, Bureau of Marine Resources Permits, or other actions.

The completed facilities plan shall contain all intergovernmental review agency comments, public hearing comments, plan revisions pursuant to comments, and a summary of how each comment was addressed.

Design

At least 90 days prior to the deadline for submission of plans, specifications, and contract documents to the Department of Environmental Quality, completed archaeological/cultural surveys shall be submitted to the State Department of Archives and History for approval; completed vegetative/wildlife surveys shall be submitted to the Natural Heritage Program for approval; and completed Section 404/Section 10 permit applications shall be submitted to the Army Corps of Engineers (and the Bureau of Marine Resources for Jackson, Harrison, and Hancock County projects). However, surveys and/or permit applications do not need to be performed or submitted if the appropriate intergovernmental review agency has determined they are not required. The Department of Environmental Quality shall be copied on the transmittal letters to the intergovernmental review agencies.

By the deadline for submission of the plans, specifications, and contract documents to the Department of Environmental Quality, approved archaeological/cultural surveys, approved vegetative/wildlife surveys, and copies of the issued Section 404/Section 10 permits and Bureau of Marine Resources Permits shall be submitted to the Department of Environmental Quality, if required for the project. Evidence of approval from the appropriate intergovernmental review agencies shall be included with the survey documents when submitted to the Department of Environmental Quality.

Loan Application

At least 60 days prior to the deadline for submission of the SRF loan application to the Department of Environmental Quality, a completed SRF loan application form, a brief narrative describing the project, a map showing the location of all proposed construction, the archaeological/cultural and vegetative/wildlife survey approval letters, and copies of the issued Section 404/Section 10 Permits and Bureau of Marine Resources Permits (or letters stating that surveys or permits are not required) shall be submitted to both the Department of Finance and Administration, Office of Policy Development and New Initiatives, and the local Planning and Development District. The Office of Policy Development and New Initiatives will solicit

comments from agencies and other interested parties and will provide the applicant with a clearance form, as appropriate.

The clearance form from the Office of Policy Development and New Initiatives, along with any comments received, shall be submitted to the Department of Environmental Quality by the deadline for submission of the SRF loan application.

1. State Historic Preservation Officer
Attention: Interagency Coordinator
Mississippi Department of Archives and History
Jackson, Mississippi 39205
Telephone: 601/359-6940
2. Natural Heritage Program
Natural Science Museum
Natural Science Museum
111 North Jefferson Street
Jackson, Mississippi 39202
Telephone: 601/395-7226
3. Department of the Army
Mobile District, Corps of Engineers
Regulatory Functions Branch
Post Office Box 2288
Mobile, Alabama 36628
Telephone: 334/694-3781

Department of the Army
Vicksburg District, Corps of Engineers
Regulatory Functions Branch
Post Office Box 60
Vicksburg, Mississippi 39180
Telephone: 601/631-5289

Department of the Army
Nashville District, Corps of Engineers
Regulatory Functions Branch
Post Office Box 1070
Nashville, Tennessee 37202
Telephone: 615/251-5181

Department of the Army
Memphis District, Corps of Engineers
Regulatory Functions Branch
B-202 Clifford Davis Federal Building
Telephone: 901/521-3471
4. Bureau of Marine Resources
2620 West Beach Boulevard
Biloxi, Mississippi 39531
Telephone: 228/385-5860
5. U. S. Fish and Wildlife Service
Post Office Drawer 1190
Daphne, Alabama 36526
Telephone: 205/690-2181
6. Department of Finance and
Administration
Office of Policy Development and
New Initiatives
455 North Lamar Street
Jackson, Mississippi 39202
Telephone: 601/359-6765
(This is the State Clearinghouse)

PLANNING AND DEVELOPMENT DISTRICTS IN THE STATE OF MISSISSIPPI

Central Mississippi Planning & Development District

Post Office Box 4935

Jackson, Mississippi 39216

Executive Director: Clarke Holmes

Telephone: 981-1511

East Central Mississippi Planning & Development District

Post Office Box 499

Newton, Mississippi 39345

Executive Director: Colbert Crowe

Telephone: 683-2007

Golden Triangle Planning & Development District

Post Office Drawer DN

Mississippi State, Mississippi 39762

Executive Director: John Allbritton

Telephone: 325-3855

North Central Mississippi Planning & Development District

Post Office Box 688

Winona, Mississippi 38967

Executive Director: Bob Williamson

Telephone: 283-2675

North Delta Planning & Development District

Post Office Box 1244

Clarksdale, Mississippi 38614

Executive Director: Leonard Morris

Telephone: 627-3401

Northeast Mississippi Planning & Development District

Post Office Box 600

Booneville, Mississippi 38829

Executive Director: Eugene Taylor

Telephone: 728-6248

South Delta Planning & Development District

Post Office Box 1776

Greenville, Mississippi 38702-1776

Executive Director: Billy Haney

Telephone: 378-3831

Southern Mississippi Planning & Development District

1020 32nd Avenue

Gulfport, Mississippi 39501

Executive Director: Leslie Newcomb Telephone: 868-2311

Southwest Mississippi Planning & Development District

110 South Wall Street

Natchez, Mississippi 39120

Executive Director: Wirt Peterson

Telephone: 446-6044

Three Rivers Planning & Development District
99 Center Ridge Drive
Pontotoc, Mississippi 38863
Executive Director: Randy Kelley

Telephone: 489-2415

APPENDIX L

SRF Procurement Protest Procedures

This Appendix sets forth the process for the resolution of procurement protests filed with the loan recipient by an adversely affected party.

- (a) Prior to advertisement for such awards, the loan recipient shall establish its own procedures for prompt consideration of initial protests concerning solicitations or subagreement awards. A "protest" is a written complaint concerning the recipient's solicitation or award of a subagreement. It must be filed with the recipient by a party with a direct financial interest adversely affected by a recipient's procurement action, and must be filed in accordance with and within the time frame established by the recipient's protest procedures.
- (b) Any party which transmits any document concerning the protest during the course of a protest and protest resolution must simultaneously furnish all other affected parties and the Department with a copy of all documents in the transmittal.
- (c) Upon receipt of a protest, the loan recipient must make a determination on the protest in accordance with the recipient's protest procedures within thirty (30) days after such receipt, or sooner if so required by the recipient's procurement protest procedures.
- (d) The party with a direct financial interest adversely affected by a loan recipient's determination of the protest may appeal such a determination only through the appropriate court of competent jurisdiction, provided such appeal is initiated within seven (7) calendar days after receipt of determination.
- (e) Any delay due to a protest or protest resolution will not relieve the loan recipient of the requirement to meet the project schedule established in the loan agreement, nor will such delays prevent the Department from pursuing the remedies for default established in the loan agreement.

APPENDIX M

Related State Laws and Regulations

The loan recipient shall comply with the following related state laws and regulations during the planning, design, construction, and operation of the project.

- Mississippi Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators
- Mississippi Water Quality Criteria for Intrastate, Interstate and Coastal Waters
- Mississippi Nonhazardous Waste Management Regulations
- Coastal Wetlands Protection Law, Mississippi Code Annotated, Section 49-27-1 (Supp. 1989), et seq..
- Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants.

APPENDIX N

NPDES and Siting Criteria Regulations

The loan recipient shall insure that all current regulations of the Commission on Environmental Quality and the Environmental Quality Permit Board are complied with during the planning, design, and construction of the SRF loan project. These regulations include "Wastewater Permit Regulations for National Pollutant Discharge Elimination System (NPDES), Underground and Injection Control (UIC) and State Operating Permits" and "Guidelines for Review of Siting Criteria in Applications for Air and Water Pollution Control Permits". It is the loan recipient's responsibility to insure that the project is in compliance with these regulations and all future amendments. Also, the loan recipient shall comply with the following requirements:

1. All planning documents submitted to the Department for review shall clearly indicate that a 150-foot buffer zone between the treatment facility and the nearest adjoining property line is provided. This shall be shown on a plan view of the treatment facility site. If it is not possible to provide a 150-foot buffer zone, the planning document shall indicate that a written waiver from the adjoining property owners will be necessary.
2. All design plans submitted to the Department for review shall clearly display the 150-foot buffer zone. If it is not possible to provide a 150-foot buffer zone, a written waiver from the adjoining property owners shall also accompany the design plans. When a waiver is necessary, it is strongly suggested that this be obtained prior to substantial work on the treatment facility design.

An NPDES permit application shall accompany all design plans for wastewater treatment facilities, if a permit or permit modification is required.

3. All appraisals, negotiations, purchase agreements, and site certificates shall include the required buffer zones, unless a waiver was previously submitted along with the design plans.

Part 6, Chapter 5: Mississippi Commission on Environmental Quality Water Pollution Control Emergency Loan Fund Program Regulations

TABLE of CONTENTS

Rule 5.1 Introductory Provisions

Rule 5.2 Program Requirements

Rule 5.3 Project Requirements

Appendices

- A. Determination of Eligible and Allowable Costs
- B. Procurement Requirements for WPCELF Loan Recipients
- C. Debarment and Suspension
- D. WPCELF Disputes Procedures
- E. Waste, Fraud and Abuse
- F. WPCELF Loan Recipient Accounting and Auditing Requirements
- G. Intergovernmental Review Process
- H. WPCELF Procurement Protest Process
- I. Related Laws and Regulations

Rule 5.1 Introductory Provisions.

- A. Scope of Regulations. These regulations, adopted pursuant to Section 49-17-86, Mississippi Code of 1972, as amended, will govern the Water Pollution Control Emergency Loan Fund (WPCELF) Program. These regulations may be superseded by the WPCELF loan agreement when a variance or exception is made by the Department and when not in conflict with any state or federal laws or executive orders.
- B. Definitions. The following words and terms, when used in these regulations, will have the following meanings, unless the context clearly indicates otherwise:
 - (1) Act - The Mississippi Water Pollution Control Revolving Fund and Emergency Loan Fund Act, Sections 49-17-81 through 49-17-89, Mississippi Code of 1972, as amended.
 - (2) Administration Fee - Those fees collected from the loan recipient to defray the reasonable costs of administering the emergency fund.
 - (3) Allowable Costs - Those project costs that are eligible, reasonable, necessary, allocable to the project, within the established project scope and budget period, in conformance with the WPCELF Regulations, and determined allowable by the Department.
 - (4) Authorized Representative - The signatory agent or office of the applicant, authorized and directed by the applicant's governing body to make application for assistance and to sign documents required to undertake and complete the project on behalf of the applicant. The signatory agent or office must be a member of, or an employee of, the applicant's governing

body and may not be under a separate contract with the applicant at any time during the execution of the project.

- (5) Budget Period - The time frame identified in the loan agreement as such, during which allowable costs may be incurred.
- (6) Change Order - The documents, including supporting documentation, executed by the loan recipient and the construction contractor, upon recommendation of the engineer if required by the contract documents, authorizing a change, alteration, or variance in the plans, specifications, and contract documents, including but not limited to, additions or deletions of work to be performed pursuant to the contract or a change in costs or time for work performed after the execution of the contract.(7)
- (7) Collector Sewer - The common lateral sewers, within a publicly owned treatment system, which are primarily installed to receive wastewaters directly from facilities which convey wastewater from individual systems, or from private property.
- (8) Commission - The Commission on Environmental Quality or its successors.
- (9) Consolidation project - The acquisition of an existing entity or its treatment works by another or the merger of two entities.
- (10) Construction - Any one or more of the following: repair, erection, building, acquisition, alteration, improvement or extension of water pollution control systems.
- (11) Contract - The contracting agreement made between the loan recipient and any other party, whether by written contract, quote, invoice, work order, or other legal arrangement, which establishes the parties to the agreement, the scope and price of goods or services to be provided, the timeframe for performance, and any other provisions required by these regulations and/or state law.
- (12) Contractor - The individual, company, party or other business enterprise awarded a contract by the loan recipient to construct any part of the project, or to supply materials, labor, equipment, or other necessary goods or services for the project. Contractor is not the same as Engineer, consultant, attorney, or other person or company providing professional services in conjunction with the project
- (13) Department - Mississippi Department of Environmental Quality and staff, and their designated representatives or successors.

- (14) Eligible Applicant - Any county, municipality, municipal public utility, district, authority, political subdivision or other governmental unit created under state law which has authority to dispose of domestic wastewater, industrial wastewater, wastewater sludges resulting from the treatment of such wastewater, stormwater, or nonpoint sources of pollution, has the authority under state law to receive WPCELf loan assistance, has the ability to comply with these regulations and the requirements of the WPCELf loan agreement, and which is not in arrears in repayments to the WPCRLF, the WPCELf or the WPALP.
- (15) Eligible Costs - Eligible costs are those costs in which WPCELf loan participation is authorized pursuant to applicable statute.
- (16) Emergency - Any circumstance caused by fire, flood, explosion, storm, earthquake, epidemic, riot, insurrection or caused by any inherent defect due to defective construction, or when the immediate preservation of public health or environmental protection is necessary by reason of unforeseen event or condition, or when the immediate restoration of a condition of usefulness or construction of any water pollution control facilities appears advisable, or as required by a pollution control or public health regulatory agency.
- (17) Emergency Fund or Fund - The Water Pollution Control Emergency Loan Fund, created pursuant to Section 49-17-86, Mississippi Code of 1972, as amended.
- (18) Engineer - Unless otherwise indicated, the engineer, or engineering firm, registered by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors, retained or employed by the loan recipient to provide professional engineering services during the planning, design and/or construction of the project.
- (19) Executive Director - The executive director of the Department of Environmental Quality, or his designee.
- (20) Financial Assistance - Loans by the Commission, acting through the Department, from the Water Pollution Control Emergency Loan Fund.
- (21) Financial Capability Summary - A financial analysis of a water pollution control system to determine whether the system has the capability to reliably meet the financial obligations on a long term basis.
- (22) Improvements - Includes making necessary repairs to existing water pollution control systems to meet the emergency and may include new construction needed to provide a permanent correction to the problems which caused the emergency.

- (23) Infiltration - Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- (24) Inflow - Water other than wastewater that enters a sewer system (including sewer service connections) as a result of rainfall or rainfall induced soil moisture from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.
- (25) Interceptor Sewer - A sewer which is designed for one or more of the following purposes:
 - (1) To intercept wastewater from a final point in an existing or proposed collector sewer and convey such wastes directly to a treatment facility or another interceptor or pump station.
 - (2) To replace an existing wastewater treatment facility and transport the wastes to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant.
 - (3) To transport wastewater from one or more municipal collector sewers to another municipality or system or to a regional facility for treatment.
 - (4) To intercept an existing discharge of raw or inadequately treated wastewater for transport directly to another interceptor, pump station or to a treatment plant.
- (26) Interlocal Agreement - An agreement or contract between the loan applicant/recipient and other entities relating to use, enforcement, or finances of the project or treatment works, which may be necessary to ensure completion of a useful project.
- (27) Loan Agreement - A legal and binding agreement between the Department and the loan recipient through which the Department provides WPCELF funds for allowable assistance and the recipient promises to repay the principal sum and interest back to the WPCELF over a period not to exceed 10 years at an interest rate established by the Commission.
- (28) Loan Applicant - An eligible applicant, as defined above, that makes a WPCELF loan application for assistance from the Department.

- (29) Loan Recipient - An eligible applicant, as defined above, that receives a WPCEL loan from the Department.
- (30) May - Whenever used in the context of an action to be taken by the loan recipient, the word "may" will be interpreted as optional but is not mandatory.
- (31) May not - Whenever used in the context of an action by the loan recipient, such an action is prohibited by these regulations.
- (32) Must - Whenever used in the context of an action to be taken by the loan recipient, the word "must" will be interpreted as mandatory.
- (33) Nonpoint Source - Pollution caused by diffuse source(s) that are not regulated as point source(s) and normally is associated with agriculture, silviculture, urban runoff and runoff from construction activities, etc.
- (34) Overflows and Bypasses - Polluted water, such as sewage, which overflows or bypasses any portion of the treatment works prior to complete and final treatment and discharge in accordance with the permit.
- (35) Permit - Unless otherwise specified, the authority granted by the Mississippi Environmental Quality Permit Board or their designated staff to discharge treated wastewater into or adjacent to waters of the state in accordance with the stipulations of the relevant National Pollutant Discharge Elimination System (NPDES) or State Operating Permit.
- (36) Plans, Specifications and Contract Documents - The engineering description of the project including engineering drawings, maps, technical specifications, design reports and construction contract documents in sufficient detail to allow contractors to adequately construct the work.
- (37) Plans, Specifications and Contract Documents Addendum - Any change made to the Plans, Specifications and Contract Documents after advertisement of the documents for bidding, but prior to opening of the bids.
- (38) Plans, Specifications and Contract Documents Revision or Amendment . Any change made to the Plans, Specifications and Contract Documents after completion of the initial documents, but prior to advertisement of the documents for bidding.
- (39) Point Source - Any discernible, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, concentrated animal feeding operation, vehicle, or vessel or other floating craft from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated

agriculture.

- (40) Project - The scope of work for which assistance is awarded under the WPCELf.
- (41) Project Completion - The date of the final construction observation, as performed by the Department, for the purpose of an allowability determination.
- (42) Protest - A written complaint to the loan recipient concerning the loan recipient's solicitation or award of a contract. The protest must be filed with the loan recipient by a party with a direct financial interest adversely affected by a loan recipient's procurement action.
- (43) Record Drawings - A final, post-construction set of reproducible design plans, revised to describe the project as it was actually constructed, including all revisions, addenda, change orders and field changes that affect items shown on the drawings.
- (44) Repayment - Principal and interest repayments on WPCELf loans as established in the loan agreement.
- (45) Service line - A conduit intended to carry wastewater, together with minor quantities of infiltration and inflow that are not admitted intentionally, from residences, public buildings and businesses to a collector sewer.
- (46) Sewer - Any pipe, conduit, or related appurtenance used to convey sewage or wastewater, including collectors, interceptors, force mains and service lines.
- (47) Title Counsel or Legal Counsel - The attorney(s) of record, legally practicing, who provide(s) legal advice and certifications relating to the project for the loan applicant/recipient.
- (48) Treatment Works (or Water Pollution Control System) - Any devices and systems which are used in the storage, treatment, recycling, and reclamation of waste, including interceptor sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units; and any works, including site acquisition of the land used for or in connection with the treatment works; and any plant, disposal field, lagoon, canal, incinerator, or other facilities installed for the purpose of treating, neutralizing or stabilizing wastewater or nonpoint source pollution or facilities to provide for the collection, control and disposal of wastewater or nonpoint source pollution.
- (49) Unilateral Change Order - Change order executed only by the loan recipient, and identified as such, in accordance with the contract documents.

- (50) User Charge Ordinance - A legally enforceable ordinance, regulation or corporate resolution enacted by the loan recipient which includes, at least by reference, the User Charge System, and establishes user charge rates to generate adequate revenues to cover all costs of the treatment works, as required by the User Charge System.
- (51) User Charge System - That system by which the loan recipient charges users of the treatment works, user rates that produce adequate revenues required for operation, maintenance, replacement of equipment, retirement of existing debt, and repayment of the WPCELF loan for the project.
- (52) Water Pollution Control System - see "Treatment Works."
- (53) Will - Whenever used in the context of an action to be taken by the loan recipient, the word "will" is to be interpreted as mandatory.
- (54) WPALP - Water Pollution Abatement Loan Program
- (55) WPCELF - Water Pollution Control Emergency Loan Fund.
- (56) WPCRLF - Water Pollution Control Revolving Loan Fund.

Source: Miss. Code Ann. §§ 49-17-81 through 49-17-89, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 5.2 Program Requirements.

- A. Eligible Applicant Determination. To be eligible for financial assistance, an applicant must meet the definition of an eligible applicant as described in Rule 5.1.B.(14) of these regulations, as determined by the Department.
- B. WPCELF Uses. The Emergency Loan Fund may be used for the following purposes, as determined by the Commission:
 - (1) To make loans to eligible applicants for projects that meet the definition of an emergency, for the purpose of making necessary repairs to existing water pollution control systems to meet the emergency;
 - (2) To make loans to eligible applicants for projects that meet the definition of an emergency, for the purpose of completing construction needed to provide a permanent correction to the problems which caused the emergency;
 - (3) For the reasonable costs of administering the WPCELF program, as allowed by state law; and
 - (4) To earn interest on fund accounts.

- C. **Project Priority.** These funds will be obligated on a first-come, first-served basis in order of those eligible applicants which complete all actions necessary to receive a loan award for eligible projects meeting the definition of an emergency, as defined in these regulations.

The Executive Director will determine whether a proposed project meets the definition of an emergency project and whether all actions necessary for loan award have been completed.

- D. **WPCELF Financing.** The WPCELF has been established to provide loans to assist eligible applicants in making emergency repairs to existing water pollution control systems and may, with Department approval, include new construction needed to provide a permanent correction to the problems which caused the emergency. Basic WPCELF financing requirements are as follows:

- (1) WPCELF loans may not exceed \$350,000, as established by state law
- (2) Loans will be made at the interest rate(s), terms and amounts determined by the Commission, and as further established in the WPCELF loan agreement and repayment agreement.
- (3) Periodic principal and interest repayments will commence as further described in Rule 5.3.F of these regulations, and all loans will be fully amortized not later than ten (10) years after project completion.
- (4) Funds will not be disbursed from the emergency loan fund without first entering into a legal and binding loan agreement with the Commission.
- (5) The fund will be credited with all repayments of principal and interest on all loans.
- (6) The applicant must not be in violation of, or delinquent on, any provisions of a previously awarded WPCELF, WPCRLF, or WPALP loan agreement.
- (7) The applicant must submit a completed application and must, in a timely manner, secure approvals of all documents required by the Department.
- (8) The applicant must establish a dedicated source of funds for repayment of the loan.

- E. **Responsibility.** The applicant/loan recipient is responsible for the proper planning, design, construction, operation, maintenance, replacement, performance, and fiscal integrity of the project. The Department's review or approval of any document does not relieve the applicant/loan recipient or any others of any liabilities or responsibilities. Department review or approval of any document is for loan eligibility/allowability purposes only and does not establish or transfer any such liability or responsibility.

- F. Other Approvals. The applicant/loan recipient must obtain approval of all necessary documents from each state, local, and federal agency having jurisdiction over or funding in the project, if so required by that agency.

Source: Miss. Code Ann. §§ 49-17-81 through 49-17-89, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 5.3 Project Requirements

A. Application for WPCELF Loan

- (1) Obtaining a Loan Application. Potential applicants may request a WPCELF loan application package by contacting the Department. The Department will transmit the loan application package to the potential applicant.
- (2) Budget Period. Costs for the project must be incurred within the Budget Period established in the loan agreement. When justified and when approved by the Department, the Budget Period may begin prior to loan award but may not begin more than 90 days prior to the issuance of a funding pre-commitment letter or receipt of the loan application by the Department. If project costs are incurred prior to loan offer, the prospective loan recipient agrees that he is proceeding at his own risk and relieves the Commission, the Department, and the Department staff of all responsibility and liability should such costs later be determined unallowable or should such funding not become available for any reason.

The end of the Budget Period will coincide with the 30 day deadline described in Rule 5.3.D.(2) of these regulations.

- (3) Contents of Application. All documents listed below must be complete and approvable when submitted to the Department.

An original WPCELF loan application package must be submitted to the Department. When forms are provided by the Department these forms must be used, and these forms may not be altered. The WPCELF loan application may request assistance only for costs that are allowable in accordance with Appendix A of these regulations and may include a construction contingency, as determined by the Department, in the project budget. The application must include in the Project Budget any administration fee charged to the loan recipient by the Department. A complete application must conform to these regulations, including all Appendices, and must include the following:

- (a) A completed WPCELF loan application form, which includes the amounts requested for construction, repairs, equipment, supplies, land/easements, testing contracts, contingency, contracts for planning, design, land acquisition, legal, engineering and other professional services during construction and any required administration fees.

- (b) A certified copy of a resolution by the loan applicant's governing body which:
 - (1) declares the existence of an emergency, which meets the definition of an emergency as defined in Rule 5.1.B.(16) of these regulations;
 - (2) agrees to implement, prior to final disbursement of WPCELF funds, an approved user charge system, as defined in Rule 5.1.B.(51) of these regulations, adequate to completely cover all costs, including repayment of the WPCELF loan;
 - (3) authorizes and designates an individual or office to serve as the authorized representative, to make application for assistance, and to sign documents required to undertake and complete the project on behalf of the applicant.
- (c) A report including a clear description of the emergency, the recommended course of action, and the estimated costs and schedule to remedy the emergency from the certified operator or engineer or other qualified personnel (i.e., contractor, equipment representative, electrician, etc.). If such project must be designed by a registered engineer in accordance with state law and the Rules and Regulations of the Mississippi State Board of Registration for Professional Engineers and Land Surveyors, the report must include the seal of the engineer who prepared the report.
- (d) Engineer's plans and specifications, if applicable.
- (e) A procurement certification from the loan applicant and the loan applicant's legal counsel, stating that all procurement actions related to the WPCELF loan project have been, and will be, in compliance with state law and Appendix B of these regulations.
- (f) A draft user charge system and ordinance. The ordinance implementing this user charge system must be enacted prior to final disbursement of WPCELF loan funds and by the date established in the WPCELF loan agreement.
- (g) A statement of the amount of all local funds necessary for the project and a financial certification from the loan applicant which states that all local funds necessary for the project have been secured, or will be secured within 30 days after loan offer, and a statement to this effect from the funding source(s). If all funds for the project are being requested from the WPCELF program, this certification need not be submitted.

- (h) A completed financial capability summary.
- (i) A legal certification from the loan applicant and the loan applicant's legal counsel, stating that (1) the loan applicant has authority under state laws and regulations to receive WPCELF loan assistance, to collect user charges through an approved user charge ordinance, to enforce the user charge ordinance and sewer use ordinance, to repay the loan under the terms of the loan agreement, to comply with all other terms of the loan agreement, to own, operate, maintain and replace the facilities to be constructed with WPCELF loan funds, and that (2) there are no restrictions under federal or state laws or regulations which may prevent the loan applicant from executing the WPCELF loan agreement and implementing the project.
- (j) If new real property or easements are necessary to construct the project, clear site certificates from the loan applicant and the title counsel indicating that the loan applicant has secured all such real property and easements (including power and other utilities).
- (k) Completion of the intergovernmental review process as described in Appendix G of these regulations, and submittal of a completed intergovernmental review certification, any intergovernmental review agency comments received, and the action required to address all comments prior to awarding contracts for construction.
- (l) All other permits, forms, documents, and supporting information that may be required by the Department.

B. Award of WPCELF Loan

- (1) Upon determination by the Department that (a) all applicable requirements of these regulations have been met, (b) all documents submitted with the application are approvable, (c) all applicable permits have been issued or will be issued, and (d) funds are available for the amount of the WPCELF loan application, the Executive Director will execute and transmit a WPCELF loan offer (includes an offer letter and loan agreement) to the loan recipient. In addition to the estimated allowable project costs as described in Appendix A of these regulations, the loan offer may include a construction contingency, as determined by the Department, in the project budget.
- (2) Upon receipt of the WPCELF loan offer, the loan recipient must execute and return it to the Department, along with a certified copy of a resolution, if not previously submitted, by the loan recipient's governing body authorizing acceptance of the loan offer within the time frame established in the WPCELF loan offer. The loan offer becomes void if not executed

and returned within the time frame specified, unless extended by the Executive Director.

- (3) Upon return of the executed WPCELf loan agreement to the Department, any administration fee established in the loan agreement will be processed accordingly and such fee will be paid to the appropriate Department administration fund.

C. Construction Phase

- (1) Schedule. The following submittals, approvals, and actions will be required during the construction phase of the project. The Department may establish other time frames within the loan agreement when properly justified.
 - (a) Within 30 days after the original loan offer all local funds necessary for the project must be secured and proof of such must be submitted to the Department.
 - (b) Within 90 days after the original loan offer, the loan recipient (1) must execute and submit to the Department a copy of all contracts for construction/ equipment/supplies and engineering planning/design and construction phase services, including contracts for land acquisition, legal, and other professional services, and must issue any remaining notices to proceed, begin remaining construction work, begin purchase of any remaining equipment/supplies funded under the loan agreement and transmit a copy of all notices to proceed to the Department, and (2) if any contracts must be bid, the loan recipient must also submit a completed loan agreement amendment request (to reflect as-bid and other executed construction contract amounts, all other executed contract amounts, a construction contingency as determined by the Department, and any original administration fee) to the Department.

The loan recipient will be responsible for assuring that every appropriate procedure and incidental legal requirement is observed in awarding these contracts.

After review, the Department will determine whether a request for an increased loan amount is justified and eligible and whether funds are available. The Department may, if determined necessary and appropriate, transmit to the loan recipient an amended WPCELf loan offer, which includes in the project budget (a) as-bid (if applicable) and other executed construction contract amounts, (b) all other contract amounts, (c) a construction contingency as determined by the Department, and (d) any original administration fee. Upon receipt of an amended WPCELf loan offer, the loan recipient must execute and return the agreement to the Department within the timeframe established in the WPCELf loan offer

letter. After execution of the original loan agreement, or if applicable the amended WPCELf loan agreement, the WPCELf loan amount will not amount must be paid by the loan recipient from sources other than WPCELf funds.

- (2) Preconstruction Conferences. If determined necessary by the loan recipient, the loan recipient may arrange and hold a preconstruction conference and, if held, must notify and allow attendance and participation by the Department.
- (3) Observation During Construction. During all times that construction work is being performed which requires the services of a registered engineer, the loan recipient must provide for full-time observation of the project by the engineer or his staff and must require the engineer's assurance that the work is being performed in a satisfactory manner in accordance with the WPCELf loan agreement and the approved plans, specifications, and contract documents, approved change orders, and in accordance with sound engineering principles and construction practices. Less than full-time observation may be allowed when properly justified and approved by the Department.

The Department is authorized to observe the construction of any project at any time for compliance with the terms of the loan agreement and to determine if the loan recipient is assuring that plans, specifications and contract documents are being followed. A representative may be stationed at the construction site by the Department. Such observation will not subject the Department to any action for damages or other liability. Such observation will not release the contractor from any obligation to perform the work in accordance with the requirements of the contract documents, nor the engineer from determining compliance with the requirements of the contract documents, nor the loan recipient from insuring compliance with the terms of the loan agreement.

The contractor, engineer, and the loan recipient must furnish the Department with every reasonable opportunity and means for observing whether the work as performed appears to be in accordance with the requirements of the loan agreement. The Department is authorized to observe and require submission of daily logs, record drawings, file notes, and any other documents prepared by any party in relation to the WPCELf funded project.

- (4) Observation of Materials and Equipment. The Department is also authorized to observe all equipment and materials furnished, including observation of the preparation or manufacture of the equipment and materials to be used.
- (5) Construction Deficiencies
 - (a) In the event construction procedures, materials or equipment appear to the Department to be substandard, otherwise unsatisfactory, and/or not in conformity with these regulations or the loan agreement, the Department

may determine such work unallowable for WPCELf loan participation, unless the loan recipient takes such action, through the engineer if applicable, in the manner provided for in the construction contract to correct any such deficiencies.

- (b) The Department may immediately begin withholding WPCELf loan payments should such substandard or unsatisfactory construction work, materials, or equipment become apparent and may require the loan recipient to repay any previously paid amounts related to such work, within 30 days of such notification. Interest may be charged on such delinquent repayments after expiration of the 30-day period at the rate established in Rule 5.3.E.(6) of these regulations. Alternatively, the Department may withhold such amounts from subsequent payment requests.
- (c) In addition to normal testing procedures required of the loan recipient, should questions arise concerning the construction work, materials, or equipment, for WPCELf loan allowability purposes the Department may request the loan recipient to perform reasonable additional tests of construction materials, equipment, or processes which the Department determines to be necessary to answer such questions during or after the construction of the project. All tests, whether for the Department or the engineer, must conform to current American Water Works Association, American Association of State Highway and Transportation Officials, or American Society of Testing and Materials published procedures, or similar acceptable criteria. The Department will specify which tests are applicable, if not described in the plans, specifications, and contract documents for WPCELf loan allowability purposes. Samples for such testing must be furnished free of cost to the Department upon request.

(6) Change Orders

- (a) General. In the event a determination is made by a loan recipient after a construction contract is let that changes or modifications to the original contract are necessary or would better serve the purpose of the loan recipient, the loan recipient may, at its discretion, execute such change orders pertaining to the construction that are necessary under the circumstances, as provided in the contract documents and when in accordance with state purchasing law. Change orders must not change, vary, or alter the basic purpose or effect of the project unless allowed by the Department. Changes must be technically adequate, the costs and time extensions must be necessary and reasonable, and allowable/unallowable costs must be appropriately separated.
- (b) Change Order Submittals. After completion of the claims resolution and/or change order negotiation process between the loan recipient and the

contractor, such changes on appropriate fully executed documents must be submitted to the Department in order to obtain a WPCELf loan eligibility/allowability determination.

All change order submittals shall include sufficient documentation for the Department's eligibility/allowability and technical review, as determined by the Department.

If any change order is submitted to the Department that is not complete and fully executed by the loan recipient, and the contractor and the engineer when appropriate, the Department may return such change order without review. However, unilateral change orders executed by the loan recipient and the engineer when appropriate, and identified as such, that are issued in accordance with the contract documents may be submitted to the Department in order to obtain a WPCELf loan eligibility/allowability determination.

The loan recipient may submit a complete and fully executed change order which has been executed conditional upon a positive WPCELf loan eligibility/allowability determination by the Department.

If possible, the allowability determination of a change order should be secured from the Department before the work is started, particularly for change orders requesting time extensions as per Rule 5.3.C.(6)(c) below. This determination may also be secured after the work is started; however, the loan recipient must bear the cost if the work is determined to be ineligible or unallowable.

When the eligible cost of a project will be significantly reduced by a change order or change orders, the Department may issue an amendment to the loan agreement decreasing the loan amount, and the loan recipient must execute such amendment within the time frame established by the Department.

- (c) Time Extensions. Change orders which include time extensions and/or documentation that the loan recipient is implementing all legal remedies provided in the contract documents for failure to complete construction when required, must be submitted to the Department prior to the date of the Department's final construction observation, as specified in Rule 5.3.D.(1) of these regulations. Otherwise, construction and construction-related work which occurs after the current allowable contract completion date will be unallowable. Justification for contract time extensions included in a change order must be prepared, but need not be submitted to the Department unless the total time extensions for the contract exceed 25% of the original contract time, in which case justification for **all** time

extensions must be submitted to the Department for an allowability determination.

Construction and construction-related work which occurs after the date representing a 25% time extension to the original contract time are allowable only to the extent determined as such by the Department, pursuant to review of the justification for all time extension change orders.

Construction and construction-related work which occurs after the date representing a 25% time extension to the original contract time, and for which a time extension change order cannot be adequately justified by the loan recipient and determined allowable by the Department, is not allowable unless the Department determines that the loan recipient is implementing all legal remedies provided in the contract documents for failure to complete construction when required.

- (7) **Contract Claims.** The Department is not a party to any contract between the WPCELF loan recipient and the construction contractor(s), the consulting engineer(s), the attorney(s), the equipment supplier(s), the subcontractor(s) or any other parties.

Upon execution of any contract between the loan recipient and any other party in regard to a WPCELF funded project, the Department does not assume any authorities, duties, responsibilities, or liabilities under such a contract.

The Department does not have any authority, duty, responsibility, or liability in contract claims identification, negotiation, resolution, or any other actions regarding contract claims under the contract(s) between the loan recipient and any other party.

No actions taken by the Department, either directly or indirectly, in regard to the WPCELF loan funded project constitute or establish any determinations, authority, duty, responsibility, or liability under the contract(s) between the loan recipient and any other party.

The loan recipient and the contracting party must resolve all claims and contract disputes by negotiation, arbitration, litigation, or other means as provided in the contract documents and state law, prior to submission of any change order or other documents to the Department, in order to obtain a WPCELF loan eligibility/allowability determination.

- (8) **Contractor's Bankruptcy or Default.** In the event of a contractor's bankruptcy or default, any proposed agreements with the bonding company (other than the bonding company serving as general contractor or fully bonding another contractor acting as their agent) must be submitted for WPCELF loan allowability determination by the Department prior to execution. If the loan recipient

determines that re-award of the construction contract, or a portion thereof, is necessary due to contractor bankruptcy or default, such proposed re-award contracts must be submitted for WPCELF loan allowability determination by the Department prior to execution. The loan recipient will be responsible for assuring that every appropriate procedure and incidental legal requirement is observed in advertising for bids or otherwise re-awarding a construction contract if this course of action is taken.

D. Post Construction Phase

- (1) Within 10 days after construction completion of each construction contract, the loan recipient must submit a determination of construction completion and must request a final construction observation by the Department.

All change orders which include time extensions and/or documentation that the loan recipient is implementing all legal remedies provided in the contract documents for failure to complete construction when required must be submitted to the Department prior to the date of the Department's final construction observation; otherwise, construction and construction-related work which occurs after the current allowable contract completion date will be unallowable.

The final construction observation may be delayed by no more than 30 days after the current construction completion date, unless further delayed by the Department pursuant to review of the loan recipient's request and justification for such delay. Should the Department staff decide that the determination of construction completion and request for final construction observation are being unreasonably delayed, a final construction observation may be immediately performed by the Department.

- (2) Within 30 days after the final construction observation performed by the Department, the loan recipient must submit: the final payment request; summary change order(s), if applicable, for all construction contracts; a complete set of record drawings for any and all other new construction work requiring design by a registered engineer and, if applicable, a certification from the engineer, or other qualified personnel when applicable, that the project has been constructed substantially in accordance with the design; final construction phase services contract amendments, if any; and all other administrative forms and documents required by the loan agreement and the Department. **Payment requests submitted after this date are not allowable, regardless of when the costs were incurred.**
- (3) Any other submittals or actions required by the loan agreement must be performed when so required and are subject to review and approval by the Department.
- (4) Following receipt of the final payment request from the loan recipient, or upon

expiration of the deadline established in Rule 5.3.D.(2) above, the Department or other designated parties may perform an audit of the WPCELF loan project for the purpose of determining compliance with the WPCELF loan agreement and to determine final allowable costs, payments made to date, and any additional payments due the loan recipient or repayment due the Department.

- (5) Upon completion of the WPCELF audit, or if an audit is not performed, following expiration of the deadline established in Rule 5.3.D.(2) above, the Department will transmit to the loan recipient a copy of the audit, if performed, a final determination of allowable costs and payments due the loan recipient or repayments due the state, and a final loan agreement. The final determination will establish a 30-day appeal deadline, as required by Rule 5.3.D.(6) below, and will require repayment of any overpayment with an interest penalty to begin accruing on the appeal deadline. The interest penalty will be as established in Rule 5.3.E.(6) of these regulations.
- (6) Within 30 days after the date of the above final determination of allowable costs, the loan recipient may submit a written appeal of the final determination including a written justification of the reason for the appeal, and supporting documentation for any disputed costs of the final determination; otherwise, the final determination of allowable costs will become the final allowable costs for purposes of WPCELF loan payments and the WPCELF loan repayment agreement.
- (7) Should an appeal be submitted in accordance with Rule 5.3.D.(6) above, the disputes procedures established in Appendix D of these regulations will be followed in order to resolve the dispute and establish the final allowable costs.
- (8) If an appeal is not submitted prior to expiration of the final determination appeal period, the loan recipient must execute and submit the final loan agreement to the Department within the deadline established by the Department.
- (9) Upon receipt of the executed final loan agreement from the loan recipient, the Department will transmit it to the State Tax Commission for execution and return to the Department.
- (10) Upon receipt of the executed final loan agreement from the State Tax Commission, the Department will transmit a copy to the loan recipient, and repayment of the WPCELF loan will commence under the terms of the loan agreement.

E. Payments to WPCELF Loan Recipients. Payments from the WPCELF may be made to WPCELF loan recipients under the following conditions:

- (1) Payments may be requested by and may be made only to loan recipients, in accordance with the WPCELF loan agreement and the loan recipient's contracts for eligible and allowable services and construction for work performed within the project scope and budget period.
- (2) Excluding the payment request for the administration fee, payments may be requested no more often than on a monthly basis, except as required by state law. Payment requests cannot include costs incurred during two different state fiscal years; therefore, two payment requests may be submitted in July: one for costs incurred through June 30th and a second for costs incurred after June 30th.
- (3) The loan recipient must deduct from all WPCELF payment requests the amount of funds provided or to be provided from all other state and federal agency funding sources for allowable WPCELF project costs.
- (4) Payment requests must be submitted by the loan recipient to the Department and must include the following:
 - (a) Completed WPCELF payment request form;
 - (b) Cumulative invoices, which clearly identify scope, time period and the particular project or contract, for all allowable costs for which payment is requested, except that invoices need not be submitted for any administration fee included in the loan agreement; and
 - (c) Any other documents required by the loan agreement;
- (5) The timing of WPCELF payments will be as follows, provided the loan recipient is in compliance with the requirements of these regulations and all provisions of the WPCELF loan agreement.
 - (a) Payment for the administration fee must be the first payment request submitted and will be paid to the appropriate Department administration fund.
 - (b) Payments for design and construction phase services may be requested and paid based upon incurred allowable costs. Such requested payment amounts are subject to verification by the Department.
 - (c) Payments for allowable construction work may be requested and paid based upon in-place work or delivered materials and equipment as specified in the construction contract(s), and as supported by invoices and

verified as accurate by the consulting engineer, if applicable, and the loan recipient, less the retainage withheld by the loan recipient. Such requested payment amounts are subject to verification by the Department.

- (d) Payments for allowable land may be requested and paid immediately after loan agreement execution, provided the Department has approved the purchase price and proof of the purchase price has been submitted with the payment request.
 - (e) The final loan payment will not be made until submission of all documents required by Rule 5.3.D.(2), enactment of the user charge ordinance as required by Rule 5.3.A.(3)(f), and determination that the loan recipient is in compliance with all other applicable provisions of the WPCELf loan agreement.
- (6) Any payments made to the loan recipient, which are at any time determined by Department to be for costs not in accordance with the WPCELf loan agreement, for ineligible or unallowable costs, or for costs related to waste, fraud, abuse or illegal acts under state or federal law, must be repaid to the WPCELf fund within 30 days of such notification by the Department. Interest may be charged on such delinquent repayments after expiration of the 30-day period at a rate of ten (10) percent per annum, compounded monthly. Alternatively, the Department may withhold such amounts from subsequent payment requests.

F. WPCELf Loan Repayment Requirements. All WPCELf loan repayments are subject to the following requirements:

- (1) Interest on amounts paid to the loan recipient will commence on the original construction contract completion date.
- (2) The amount of interest accrued between the original construction contract completion date and the initiation of the repayment process will be added to the final allowable project costs to determine the principal amount to be repaid by the loan recipient.
- (3) The repayment period will be from the time of transmittal of the final loan repayment agreement to the loan recipient to the date not later than ten (10) years after project completion, or sooner, if so requested by the loan recipient.
- (4) Repayments are to be made by counties on a semi-annual basis through homestead exemption annual tax loss reimbursement withholdings, by municipalities on a monthly basis through state sales tax withholdings if adequate to provide such repayments, and by all other loan recipients through submission of monthly payments in accordance with state law, and must commence no sooner than 90 days after and no later than one year after project completion.

- (5) The repayment interest rate will be established in the WPCELF loan agreement and repayment agreement, in accordance with the appropriate Notice of Funds availability.
- (6) Interest will be compounded monthly.

Source: *Miss. Code Ann. §§ 49-17-81 through 49-17-89, 49-2-1, et seq. and 49-17-1, et seq.*

APPENDIX A

Determination of Eligible and Allowable Costs

CONTENTS

- A. General
- B. Construction
 - 1. Allowable
 - 2. Unallowable
- C. Equipment, Materials and Supplies
 - 1. Allowable
 - 2. Unallowable
- D. Change Orders
- E. Professional Services
 - 1. Allowable
 - 2. Unallowable
- F. Claims
 - 1. Allowable
 - 2. Unallowable
- G. Mitigation
 - 1. Allowable
 - 2. Unallowable
- H. Publicly Owned Small and Onsite Systems
 - 1. Allowable

- 2. Unallowable
- I. Real Property
 - 1. Allowable
 - 2. Unallowable
- J. Miscellaneous Costs
 - 1. Allowable
 - 2. Unallowable
- K. Project Income from Bid Bond Forfeitures, Liquidated Damages, and Interest on SRF Loan Payments

A. General

Eligible costs are those costs in which WPCELF loan participation is authorized pursuant to applicable statute. Allowable costs are eligible costs that meet the following general criteria in addition to any specific identification as an allowable cost within Appendix A:

- (1) Be necessary and reasonable for the proper and efficient administration and construction of the project, be allocable to the project, and not be a general expense required to carry out the overall responsibilities of the loan recipient.
- (2) Be authorized or not prohibited under state or local laws or regulations.
- (3) Conform to any limitations or exclusions set forth in state laws, or other governing limitations as to types or amounts of cost items.
- (4) Be consistent with policies, regulations, and procedures that apply uniformly to both state assisted and other activities of the loan recipient.
- (5) Be accorded consistent treatment through the application of generally accepted accounting principles appropriate to the circumstances.
- (6) Not be allocable to, or included as, a cost of any other federally or state financed program in either the current, prior, or future period.
- (7) Be determined allowable by the Department after review of necessary books, records and other documents related to the costs. Failure to cooperate with the Department regarding access to project records or refusal to provide such records when requested by the Department may result in such costs being determined unallowable for WPCELF participation.
- (8) Be within the scope of the project and budget period as described in the loan agreement.
- (9) Be determined without regard to any previous federal grant, WPCELF or WPCRLF loan funding provided for facilities to be replaced, upgraded, or rehabilitated, except as described in Rule 5.2.D.(6) of these regulations.
- (10) Be within the scope of projects that meet the definition of an emergency and are allowed under Rule 5.2.B. of these regulations.
- (11) Be procured in accordance with Appendix B.

B. Construction

- (1) Allowable costs include:

- (a) The costs of contracts for construction work on the project, including prime contracts, subcontracts and the direct purchase of equipment, materials and supplies by the loan recipient.

Eligible items in the project may include treatment works (which includes wastewater treatment, interceptors, collectors, and other items; see the definitions), nonpoint source management programs, and estuary conservation and management plans.

- (b) Collectors, including conventional gravity, small diameter gravity, pressure, and vacuum systems.

For wastewater collection projects which provide sewers to existing buildings, service lines between the public sewer and the point five (5) feet from the outside wall of existing residences and public buildings are allowable. Service lines between the public sewer and the property line of existing businesses are allowable.

- (c) The costs of sewer system rehabilitation (including rehabilitation of allowable service lines) necessary to eliminate or prevent bypasses or overflows, or to provide proper operation of the treatment works.
- (d) The cost of treatment works capacity adequate to transport and treat infiltration/inflow that will remain in the system.
- (e) Treatment works which serve industrial or commercial users when such works are publicly owned.
- (f) Reserve capacity within a design period of up to twenty years (forty years for interceptors, including pump stations and force mains serving as interceptors).
- (g) Construction of nonpoint source pollution control projects and estuary improvements projects.

On such projects which are also designed to provide for drainage, flood control, or any purposes other than control of pollutants or estuary improvements, only the portion of the project needed for emergency control of pollutants or estuary improvements is allowable.

- (h) Construction of treatment and transportation facilities for control of pollutant discharges from a separate or combined storm sewer system. On such projects which are also designed to provide for drainage, flood control, or any purposes other than control of pollutants, only the portion of the project needed for control of pollutants is allowable.

- (i) The cost associated with the preparation of the project site before, during and, to the extent provided in the loan agreement, after construction. These costs include:
 - i. The cost of demolition of existing structures on the project site if construction cannot be undertaken without such demolition. Demolition of existing structures on the project site when not required for constructing the project, will be considered to be an allowable cost only if the existing structures constitute a real and present hazard to safety, public health, or water quality which can best be abated by the removal of the existing structures.
 - ii. The cost of removal, relocation or replacement of utilities, provided the loan recipient is legally obligated to pay for such by law.
 - iii. The cost of restoring streets and rights-of-way to their original condition. The need for such restoration must result directly from the construction and is generally limited to repaving the width of trench.

(2) Unallowable costs include:

- (a) Construction and construction related costs which are incurred after the Department-determined allowable contract completion date (including allowable time extension change orders), unless approved by the Department pursuant to Rule 5.3.C.(6)(c) of these regulations.
- (b) Treatment works which serve federal users exclusively, or almost exclusively.
- (c) Bonus payments for completion of construction before a contractual completion date unless required by state law.
- (d) The cost of additional insurance (e.g., for a specific project) beyond that normally carried by the contractor.

C. Equipment, Materials and Supplies

(1) Allowable costs include:

- (a) The cost of a reasonable inventory of laboratory chemicals and supplies necessary to initiate plant operations and laboratory items necessary to conduct tests required for plant operation.

- (b) The costs for purchase and/or transportation of biological seeding materials required for expeditiously initiating the treatment process operation.
- (c) The cost of shop equipment installed at the treatment works necessary to the operation of the works. The need will depend on the specific item, its frequency of expected use, and the size and complexity of the treatment facility. Undoubtedly, larger treatment facilities will have a greater need for installed shop equipment than smaller ones. Where the proposed items of equipment are inappropriate to the size and/or complexity of the treatment works, the Department may determine that the proposed equipment is unallowable.
- (d) The costs of necessary and reasonable safety equipment, provided the equipment meets applicable federal, state, local or industry safety requirements.
- (e) The costs of necessary and reasonable collection system maintenance equipment.
- (f) The cost of mobile equipment necessary for the operation of the overall wastewater treatment facility, transmission of wastewater or sludge, or for the maintenance of equipment. These items include:
 - i. Portable stand-by generators.
 - ii. Large portable emergency pumps to provide "pump-around" capability in the event of pump station failure or pipeline breaks.
 - iii. Sludge or septage tankers, trailers, and other vehicles having as their sole purpose the transportation of liquid or dewatered wastes from the collector point (including individual or onsite systems) to the treatment facility or disposal site.
 - iv. Tillage, planting and harvesting equipment that is documented as necessary and reasonable for producing the crops which are an integral part of the land treatment process, and other vehicles demonstrated necessary to the facility and approved in advance by the Department.

Mobile equipment necessary for the operation of the overall wastewater treatment facility may also include vehicles necessary for the daily removal and disposal of grit. While vehicles used for other purposes (e.g., sludge tanks or trailers) would normally serve this purpose, large facilities may have a sufficient need to justify a separate vehicle to be used solely for the transportation and disposal of grit. Additionally, for projects which

involve the landspreading of sludge as the method of ultimate sludge disposal, the necessary vehicles and equipment for proper sludge application.

- (g) Replacement parts identified and approved in advance by the Department as necessary to assure uninterrupted operation of the facility, provided they are critical parts or major systems components which are:
 - i. not immediately available and/or whose procurement involves an extended "lead-time," or
 - ii. identified as critical by the equipment supplier(s), or
 - iii. critical but not included in the inventory provided by the equipment supplier(s).
- (h) Flow metering devices used for billing purposes. The costs of constructing or installing flow metering devices and appurtenances used for billing intergovernmental and major user flows are allowable costs. Meters constructed or installed for the primary purpose of billing individual residential, commercial, public or industrial users are not allowable.
- (i) The cost of furnishings, office equipment, and maintenance equipment dedicated solely to the pollution control project. Necessary and reasonable office furnishings and equipment include chairs, desks, file cabinets, typewriters, coffee tables, telephones, office supplies, calculators, copiers, book cases, shelves and lamps. Ordinary site and building maintenance equipment such as lawnmowers, rakes, shovels, brooms, picks, hedge trimmers, and other such equipment. Hand tools such as screw drivers, pliers, socket wrenches, electric drills or saws, etc.
- (j) Computers. Computers, display monitors, and computer software which are designed into the control system for the daily operation of the treatment works.

Computers are also allowable if they are to be used for the operational control and analysis of the treatment works. Examples of such allowable uses include the scheduling of equipment maintenance and replacement, the operation of the loan recipient's pretreatment program, including the scheduling of tests to verify industrial compliance with pretreatment requirements, and for accounting and billing services.

The cost of computer software specifically designed for the operation and maintenance of the treatment works is also allowable for loan participation. This includes the cost of developing unique operating programs for the specific loan funded project.

- (2) Unallowable costs include:
- (a) The costs of equipment or material procured in violation of Appendix B.
 - (b) The cost of vehicles for the transportation of the loan recipient's employees, including buses, trucks, cars, motorcycles, golf carts, bicycles, etc.
 - (c) Items of routine "programmed" maintenance such as ordinary piping, air filters, couplings, hoses, belts, etc.
 - (d) Radios, televisions, VCRs, camcorders, and other items of a similar nature.
 - (e) Large stocks of laboratory and other chemicals and supplies above a reasonable inventory necessary to initiate plant operations.

D. Change Orders

- (1) Change order costs are allowable provided they are:
- (a) Necessary and reasonable.
 - (b) Within the scope of the project.
 - (c) Not caused by the loan recipient's mismanagement.
 - (d) Not caused by the loan recipient's vicarious liability for the improper actions of others.
 - (e) In conformance with the WPCELF regulations.
- (2) Provided the above requirements are met, the following are examples of allowable change orders.
- (a) Construction costs resulting from defects in the plans, design drawings and specifications, or other contract documents only to the extent that the costs would have been incurred if the contract documents on which the bids were based had been free of the defects, and excluding the costs of any rework, delay, acceleration or disruption caused by such defects.

Additional costs to correct defects (i.e., errors and omissions in the contract documents) and other costs caused by the impact of such defects on other portions of the project, are not allowable. For example, if the construction drawings had omitted return sludge piping from the secondary clarifiers to the aeration tanks and the engineer or contractor detected this before construction was undertaken,

the cost of a change order to include the piping would be an allowable cost, because:

- i. the piping would have been included in the original bid,
- ii. no additional construction or rework was required (beyond what would have been required if the work had originally been included), and
- iii. there was no cost impact on other portions of the project (since construction work had not begun).

If this omission had been realized after substantial construction work had been completed, and therefore required rework, delay, or additional work beyond that which would have been required by defect free drawings, the cost of the piping would still have been allowable, but the additional cost of rework or delay would have been unallowable.

The additional cost is measured as the difference between the cost which would have been included in the bid based on defect free drawings and the actual cost of the change order. For example, if a concrete tank had been constructed and was later found to be at an incorrect elevation due to an error in the design drawings and if it was necessary to demolish the tank and reconstruct it at the correct elevation, the entire change order would be unallowable, except for differences in excavation costs. If additional excavation was required to enable the tank to be constructed at the correct elevation (i.e., the incorrect elevation was too high), the cost of the additional excavation would be allowable. However, if too much excavation had been undertaken and fill was required to enable the tank to be constructed at the correct elevation (i.e., the incorrect elevation was too low), both the entire change order and the cost of the unnecessary excavation would be unallowable.

Regardless of the allowability or unallowability of construction costs to correct errors and omissions, in no case are additional engineering, legal, inspection, or other costs allowable, except for the cost of inspecting allowable construction work, to the extent that such inspection costs would have been incurred to inspect the same construction if such construction had originally been included in defect-free drawings.

- (b) Equitable adjustments for differing site conditions.

E. Professional Services

The term professional services refers to engineering, legal, administrative, and similar services. Should any costs for such professional services be incurred prior to loan award, such costs will be allowable provided the loan recipient has requested and obtained

Department approval of such costs and the loan agreement budget period includes the time period during which these costs are incurred.

(1) Allowable costs include:

- (a) Pre-award costs. These costs include all engineering and other costs that are incurred in applying for the loan, including, but not necessarily limited to:
 - i. Public notification and public hearings.
 - ii. Preparing the plans, specifications, and contract documents.
 - iii. Preparing the draft user charge ordinance and draft user charge system.
 - iv. Preparing interlocal agreements necessary for the project.
 - v. Surveys and all other work needed to obtain clearance or permits from all intergovernmental review agencies.
 - vi. Preparing the loan application, applications for permits required by federal, state or local laws, regulations or procedures.
 - vii. Compliance with the requirements of the Mississippi Real Property Acquisition Policies Law, if required.
- (b) The costs of services incurred during the advertisement, award and construction of a project to insure that it is built in conformance with the design drawings and specifications. These services are primarily engineering and construction management services provided during the advertisement, award and construction of the project, including inspection services, materials testing (e.g., concrete strength, soil compaction, etc.) required by the specifications, inspecting and expediting the delivery of equipment and material purchased directly by the loan recipient, review of shop drawings and record drawings, preparing change orders, payment processing, etc.
- (c) The costs of legal, engineering, and other services incurred by the loan recipient in deciding procurement protests and defending their decisions in protest appeals under Appendix H are allowable regardless of the outcome of the protest, provided there was not an attempt by the loan recipient to violate or circumvent state purchase laws.
- (d) The cost of development of an operation and maintenance manual.

- (e) Start-up services for onsite training of operating personnel in operation and control of specific treatment processes, laboratory procedures, and maintenance and records management, provided these costs are incurred prior to the end of the 30 day period established in Rule 5.3.D.(2) of these regulations.
 - (f) Administrative services associated with the construction of the project and administering the WCPELF loan.
 - (g) Professional liability insurance premiums for a provider of professional services are allowable only for insurance which the provider maintains in connection with the general conduct of its business. The types and extent of coverage must be in accordance with sound business practice, and the rates and premiums must be reasonable under the circumstances. The maintenance of professional liability insurance is a sound business practice, and the premiums are allowable, but only as part of an indirect cost agreement.
 - (h) The cost of services, other than engineering services during construction, such as railway or highway flagmen, or utility or highway inspectors, required during the construction of the project, are allowable provided that:
 - i. The entity responsible for the affected railway, highway, or utility requires such services for all parties conducting similar types of work, regardless of the source of construction funding for the project, or the services are required by law.
 - ii. The project work requiring such services is allowable, and is included in the scope of the approved project.
 - iii. The cost of such services has not been included in the construction contractor's bid price.
 - iv. The cost of such services is incurred directly by the loan recipient.
 - v. The cost is reasonable.
- (2) Unallowable costs include:
- (a) Except as provided in Appendix A, Section D.(2)(a), engineering services or other services necessary to correct defects in design drawings and specifications, or other subagreement documents.
 - (b) Public Liaison Services.

- (c) The cost of local travel (i.e., commuting expenses) between living quarters and the construction site for persons working at the site.
- (d) Acquisition of unallowable real property.
- (e) The cost of insurance (e.g., for a specific project), beyond that normally carried by the professional services firm.

F. Claims

- (1) Allowable costs, provided the costs are properly documented, incurred and requested prior to the end of the 30 day period established by Rule 5.3.D.(2) of these regulations include:
 - (a) Change orders to the construction contract as a result of settlements, arbitration awards, or court judgments, to the extent that they would have been allowable had there not been a claim.
 - (b) The costs of legal, engineering, and other services incurred by the loan recipient in deciding procurement protests and defending their decisions in protest appeals under Appendix H are allowable regardless of the outcome of the protest, provided there was not an attempt by the loan recipient to violate or circumvent state purchase laws.
 - (c) The costs of assessing the merits of, negotiating, or defending against a claim against the loan recipient are allowable, regardless of the outcome, provided that the matter under dispute is not the result of fraudulent or illegal actions, or mismanagement, on the part of the loan recipient.
 - (d) Alterations in construction, engineering, legal, etc. contracts as a result of settlements, arbitration awards, or court judgments are allowable to the same extent that they would have been allowable had there not been a claim.
- (2) Unallowable costs include:
 - (a) Claims arising from work outside the scope of the loan.
 - (b) Claims resulting from fraudulent or illegal activities.
 - (c) Claims resulting from mismanagement by the loan recipient.
 - (d) Claims resulting from the loan recipient's vicarious liability for the improper action(s) of others.
 - (e) The cost of settlements, arbitration awards or court judgments over and

beyond the allowable costs had there not been a claim, as established in these regulations.

G. Mitigation

(1) Allowable costs include:

- (a) Costs necessary to mitigate only direct, adverse, physical impacts resulting from construction of the project.
- (b) The costs of reasonable site screening necessary to comply with facilities plans, and necessary to screen adjacent properties.
- (c) The cost of groundwater monitoring facilities necessary to determine the possibility of groundwater deterioration, depletion or modification resulting from construction of the project.

The extent of the allowable costs for groundwater monitoring facilities is decided on a case-by-case basis, and depends on the size and complexity of the project and the present and potential future use of the groundwater.

(2) Unallowable costs include:

- (a) The costs of solutions to aesthetic problems, including design details which require expensive construction techniques and architectural features and hardware, that are unreasonable or substantially higher in cost than approvable alternatives and that neither enhance the function or appearance of the treatment works nor reflect regional architectural tradition.
- (b) The cost of land acquired for the mitigation of adverse environmental effects identified pursuant to an environmental review.

H. Publicly Owned Onsite Systems

(1) Allowable costs include:

- (a) The cost of major rehabilitation, upgrading, enlarging, and installation of onsite systems.

Major rehabilitation may include, as an allowable cost, the demolition and removal of an existing privately or publicly owned onsite system.

- (b) Collection or service lines to an offsite treatment unit which serves a cluster of buildings.

- (c) The cost of restoring individual system construction sites to their original condition.
- (2) Unallowable costs include:
 - (a) Those portions of treatment works which have surface discharges from individual residences or clusters, unless each discharge has a valid NPDES permit.
 - (b) Modification to physical structure of homes, commercial buildings, or any other structures which are not a part of the public treatment works project.
 - (c) Wastewater generating fixtures such as commodes, sinks, tubs, and drains.

I. Real Property and Existing Improvements

- (1) Allowable costs include:
 - (a) The cost of land that will be part of the project, acquired in accordance with the Mississippi Real Property Acquisition Policies Law in fee simple title or by easement. Except as allowed under Section I.(2) below, such land must be acquired at fair market value based on an appraisal or a condemnation proceeding, unless the purchase price of a parcel is \$10,000 or less. These costs include:
 - i. The cost of a reasonable amount of land acquired for the construction of treatment works, considering the need for buffer areas, berms, and dikes. Buffer areas may be designed as part of the project to conform with Mississippi Environmental Quality Permit Board regulations, to screen sites from public view, to control public access, and to improve aesthetics.
 - ii. The cost of land acquired for composting or temporary storage of compost residues which result from wastewater treatment.
 - iii. Where properties are only partially acquired for project purposes, necessary compensation of property owners for the reduced value of their remaining land.
 - (b) The cost of acquiring all or part of an existing publicly or privately owned wastewater treatment works and necessary land for a consolidation project, provided all of the following criteria are met:
 - i. The acquisition, in and of itself, considered apart from any upgrade, expansion or rehabilitation, provides new pollution control benefits;

- ii. The primary purpose of the acquisition is not the reduction, elimination, or redistribution of public or private debt; and
- iii. The acquisition does not circumvent federal, state or local requirements.

(2) Unallowable costs include:

For parcels costing over \$10,000, any amount paid by the loan recipient for allowable land in excess of fair market value, based on an appraisal or any condemnation proceeding. For parcels costing over \$10,000, an amount other than the determination of fair market value may be found allowable through an administrative settlement if the loan recipient provides sufficient written documentation to the Department that it is reasonable, prudent and in the public interest, such as when negotiated purchase is unsuccessful and condemnation action may entail a long delay or excessive costs. Documentation may include evidence of purchase negotiations, real property sales data, estimated court settlement and legal costs based on previous condemnation proceedings.

J. Miscellaneous Costs

(1) Allowable costs include:

- (a) The costs the loan recipient incurs for equipment, material and supplies necessary for the construction project.
- (b) Unless otherwise specified in these regulations, the costs of meeting specific legal requirements directly applicable to the project.
- (c) Costs for necessary non-local travel directly related to accomplishment of project objectives, such as costs of loan recipient employees attending training workshops/seminars that are necessary to provide instruction in administrative, fiscal or contracting procedures required to complete the construction of the treatment works. Travel not directly related to a specific project, such as travel to professional meetings, symposia, technology transfer seminars, lectures, etc., may be recovered only under an indirect cost agreement.
- (d) Cost of royalties for the use of, or rights in, a patented process or product. Reasonable royalties associated with the procurement of the right to use, or the rights in, a patented product, apparatus, or process are allowable costs, provided that they are:
 - i. necessary,

- ii. based on a published fee schedule or on reasonable fees charged to other users under similar conditions.

Periodic payment of royalties for the right to operate under a patent are considered operating costs, and are unallowable for loan participation.

(e) Buildings

Allowable costs for buildings include those portions of the building which are directly related to the project, including buildings housing equipment and unit processes, laboratories, employee locker rooms, workshop areas, storage facilities for operational supplies, spare parts and equipment, necessary lavatory facilities, operator office space, etc. Those portions of an administration building which are not necessary for the daily operation and maintenance of the project are unallowable costs, including portions of the building used for public works functions (other than wastewater treatment), general accounting functions, conference rooms with associated audio-visual equipment, or other general uses not necessary for the operation of the project. Where larger facilities include conference rooms to be used exclusively for training of employees, such space is allowable if reasonable, and if approved by the Department as part of the loan award.

Where unallowable building space is included in an otherwise allowable administration building, the allowable cost is determined by using the ratio of allowable floor space divided by the total floor space in the building. The costs of buildings and portions of buildings which are unallowable are to be deducted from the allowable project construction costs for loan computation purposes. Costs associated with unallowable buildings and portions of buildings (e.g., landscaping, driveways, parking spaces, electrical service, and other utility costs) are also unallowable, and must be deducted proportionately from the allowable construction costs.

(f) Facilities For Income Generation from Processed Sludges and Crops
Facilities which have the potential for generating project income to offset O&M costs are allowable if they are necessary to provide stabilized and processed sludges which are to be managed for income generation, or crops which are grown for sale as an integral part of the wastewater land treatment or sludge utilization process.

Facilities and equipment built for processing crops grown on land to which sludge or wastewater has been applied may be an allowable cost if the recipient has all financial interest in the crop and if those facilities are necessary and reasonable to prepare the crop for prompt delivery to its market. Crop processing facilities could involve grain drying or fermenting.

Facilities built for processing crops or sludge into marketable products such as compost or heat-dried pellets may be allowable if those facilities are necessary and reasonable to cost-effectively prepare the product for prompt delivery to its market. Processing facilities could include the drying and pelletizing operation when this approach has been selected to stabilize the product. Facilities to store the marketable products to get more favorable prices, to transport the product for sale to a market, or to optimize marketing of the product, such as bagging operations, are also allowable.

- (g) Any administration fee charged to the loan recipient.

(2) Unallowable costs include:

- (a) Ordinary operating expenses of the loan recipient including salaries and expenses of the loan recipient's employees and elected and appointed officials and preparation of routine financial reports and studies.
- (b) Administrative, engineering and legal activities associated with the establishment of special departments, agencies, commissions, regions, districts or other units of government.
- (c) Approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project and the interest on them.
- (d) Personal injury compensation or damages arising out of the project.
- (e) Fines and penalties due to violations of, or failure to comply with, federal, state or local laws, regulations or procedures, and related legal expenses.
- (f) Costs outside the scope or budget period of the approved project.
- (g) Costs for which payment has been or will be received from another state or federal source.
- (h) Operation and maintenance costs of the treatment works.
- (i) Lease payments.

K. Project Income From Bid Bond Forfeitures, Liquidated Damages, and Interest on WPCELF Loan Payments:

- (1) Bid bond forfeitures shall have no effect on the determination of allowable and unallowable costs. The loan recipient shall make the determination of whether or not a bid bond will be forfeited.

- (2) Liquidated damages shall have no effect on the determination of allowable and unallowable costs, except as required by Rule 5.3.C.(6)(c) of these regulations.
- (3) Interest income on WPCELF payments to loan recipients shall have no effect on the determination of allowable and unallowable costs.

APPENDIX B

Procurement Requirements for WPCELF Loan Recipients

In the procurement of all repairs, construction, equipment, materials, supplies, professional services and non-professional services and all other costs related to the WPCELF project, all loan recipients must comply with state purchasing laws. All allowable contracts must conform to the definition of a contract in these regulations.

The procurement and conduct of all professional engineering and land surveying services must also be in accordance with the Code of Conduct and other guidance and interpretations established by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

The procurement of all construction contracts must also be in accordance with the rules and regulations of the State Board of Contractors and other guidance and interpretations established by the Mississippi State Board of Contractors.

All loan recipients must submit a procurement certification, as required by the Department, indicating that all of the above referenced requirements have been met. Should it be determined that any of the above procurement requirements are violated, the Department may determine that the related costs are unallowable and may require repayment of all WPCELF Loan funds paid for such costs, in accordance with Rule 5.3.E.(6) of these regulations.

APPENDIX C

Debarment and Suspension

Loan recipients are prohibited from entering into contractual agreements with individuals, businesses, organizations, or any other entities that have been debarred or suspended by the U.S. Environmental Protection Agency, any other federal agency, state agency or by the Department. Entities debarred or suspended by the federal agencies are identified in the General Services Administration (GSA) publication entitled "List of Parties Excluded from Federal Procurement or Nonprocurement Program."

Loan recipients are responsible for ensuring that prime contractors utilized on the project are not on the federal or state debarment lists. Likewise, prime contractors are responsible for ensuring that subcontractors utilized on the project are not on the federal or state debarment lists.

Anyone may contact the Department concerning the existence of a cause for debarment or suspension. The Department may refer the matter to the state Attorney General or other appropriate office for further investigation. If, after review or investigation, the Department reasonably believes that a cause for debarment exists, the Department may propose debarment or suspension and may initiate procedures similar to, but not necessarily identical to, federal regulation 40 CFR Part 32: Debarment and Suspension Under EPA Assistance Programs.

Such above described debarment or suspension actions will not affect existing executed contractual agreements, unless such agreements have been terminated or suspended under the terms of the agreement by the loan recipient.

APPENDIX D

WPCELF Disputes Procedures

Only WPCELF loan recipients may submit a notice of dispute (disagreement) with a decision made by the Department. The following procedures will be used to resolve disputes between the loan recipient and the Department.

- (1) The loan recipient must submit a written notice of dispute with a Department decision, including a summary of the dispute and reasons for why the loan recipient believes the Department decision should be reversed.
- (2) The Department staff will then render a written decision on the dispute and will include reasons for the decision.
- (3) Should the loan recipient desire to appeal the Department staff decision, a request for an informal hearing must be received by the Department within 30 days after the date of the Department staff decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Head of the Office of Pollution Control, and the affected parties. The Office Head, or his designee, will render a decision on the appeal as a result of the informal hearing.
- (4) Should the loan recipient desire to appeal the above informal hearing decision, a request for a formal hearing before the Commission on Environmental Quality must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission will hold a formal hearing to consider the matter and will render a decision.
- (5) Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

APPENDIX E

Waste, Fraud and Abuse

It is the loan recipient's responsibility for preventing, detecting, and prosecuting waste, fraud, abuse, and all other corrupt practices which may occur in relation to the WPCELF loan project.

If the loan recipient becomes aware of allegations, evidence, or the appearance of corrupt practices, the loan recipient must:

- (1) Immediately inform the Department in writing.
- (2) Promptly pursue available state and local legal, administrative, and contractual remedies.

The Department may disallow costs under the WPCELF loan agreement where it is determined that such costs are related to waste, fraud, abuse, or other corrupt practices. The Department may also require repayment of WPCELF loan funds paid for such costs in accordance with Rule 5.3.E.(6) of these regulations.

APPENDIX F

WPCELF Loan Recipient Accounting and Auditing Requirements

All WPCELF loan recipients must maintain project accounts in accordance with generally accepted government accounting standards, as defined by the Guidelines of the Municipal Accounting and Audit Manual, as prescribed by the State Auditor's Office. Charges to the project account must be properly supported, related to allowable construction costs, and documented by appropriate records. These project accounts must be maintained as separate accounts.

The Department and its representatives shall have access to and the right to audit, inspect, copy and examine all books, financial records and other documents relating directly to the receipt and disbursement of WPCELF funds. Failure to cooperate with the Department regarding access to project records or refusal to provide such records when requested by the Department may be considered justification for debarment of the Loan Recipient and/or its Contractor, Engineer, attorney, or other person or company providing any services in conjunction with the project.

APPENDIX G

Intergovernmental Review Process

The Intergovernmental Review (IGR) Agencies are as follows:

- (1) Mississippi Department of Archives and History (For archaeological/cultural resources review under the state Antiquities Law);
- (2) Mississippi Department of Wildlife, Fisheries and Parks, Natural Heritage Program (For vegetative/wildlife review under the Nongame and Endangered Species Conservation Act);
- (3) U.S. Army Corps of Engineers, Regulatory Functions Branch (For wetlands, floodplain impact and Section 10 - navigable waterway review);
- (4) Mississippi Department of Marine Resources (Jackson, Harrison, and Hancock County projects only; for shellfish and Mississippi Coastal Program review)
- (5) U.S. Forest Service (projects located in a federally designated Wild and Scenic River basin only, for federal Wild and Scenic Rivers Act compliance)

It is the loan applicant's/recipient's responsibility to take all actions necessary to satisfy the IGR agencies and obtain their concurrence in the project prior to awarding contracts for construction of the project. An intergovernmental review certification must be submitted as part of the WPCELF loan application package.

APPENDIX H

WPCELF Procurement Protest Procedures

This Appendix sets forth the process for the resolution of procurement protests filed with the loan recipient by an adversely affected party. The Loan Recipient's protest procedures must include the requirements of this Appendix.

- (1) Prior to advertisement for bids or proposals, the loan recipient must establish its own procedures for prompt consideration of initial protests concerning solicitations or contract awards. A "protest" is a written complaint concerning the loan recipient's solicitation or award of a contract. The protest must be filed with the loan recipient by a party with a direct financial interest adversely affected by a loan recipient's procurement action, and must be filed in accordance with and within the time frame established by the loan recipient's protest procedures.
- (2) Any party which transmits any document concerning the protest during the course of a protest and protest resolution must simultaneously furnish all other affected parties and the Department with a copy of all documents in the transmittal.
- (3) Upon receipt of a protest, the loan recipient must make a determination on the protest in accordance with the loan recipient's protest procedures within thirty (30) calendar days after such protest, or sooner if so required by the loan recipient's procurement protest procedures.
- (4) The party with a direct financial interest adversely affected by a loan recipient's determination of the protest may appeal such a determination only through the appropriate court of competent jurisdiction, provided such appeal is initiated within seven (7) calendar days after receipt of the determination.
- (5) Any delay due to a protest or protest resolution will not relieve the loan recipient of the requirement to meet the project schedule established in the loan agreement, nor will such delays prevent the Department from pursuing the remedies for default established in the loan agreement.

APPENDIX I

Related Laws and Regulations

During the planning, design, construction, and operation of the project, the loan recipient shall comply with all applicable laws and regulations and shall acquire all applicable permits as described in the Departmental publication "Environmental Permit Directory", or its successor. The applicable related laws and regulations are listed below. The WPCELF regulations are not complete without these laws and regulations.

- A. Guidelines for Review of Siting Criteria in Applications for Air and Water Pollution Control Permits. The loan recipient shall also comply with the following related requirements:
 - (1) All design plans submitted to the Department for review shall clearly display that a 150-foot buffer zone between the treatment facility and the adjoining property lines (unless exempted by zoning) is provided. This shall be shown on a plan view of the treatment facility site. If it is not possible to provide a 150-foot buffer zone, a written waiver from the adjoining property owners shall also accompany the design plans. When a waiver is necessary, it is strongly suggested that this be obtained prior to substantial work on the treatment facility design.
 - (2) An NPDES or State Operating Permit application shall accompany all design plans for wastewater treatment facilities, if a permit or permit modification is required.
 - (3) All appraisals, negotiations, purchase agreements, and site certificates shall include the required buffer zones, unless a waiver was previously submitted along with the design plans.
 - (4) In cases where a needed waiver cannot be obtained, the loan recipient may pursue a variance from the 150-foot buffer zone requirement as provided in section 3.(c) of the Permit Board's "Guidelines for Review of Siting Criteria in Applications for Air and Water Pollution Control Permits."
- B. State of Mississippi Water Quality Criteria for Intrastate, Interstate and Coastal Waters
- C. Mississippi Nonhazardous Waste Management Regulations
- D. Mississippi Coastal Wetlands Protection Law, Section 49-27-1 through 49-27-69, Mississippi Code Annotated, (Supp. 1989), et seq.
- E. Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
- F. Wastewater Permit Regulations for National Pollutant Discharge Elimination System

(NPDES), Underground and Injection Control (UIC) and State Operating Permits

- G. State of Mississippi Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators
- H. Mississippi Municipal and Domestic Water and Wastewater System Operator's Certification Act of 1986, Sections 21-27-201 through 21-27-221, Mississippi Code of 1972, annotated.
- I. Mississippi Water Pollution Control Revolving Fund and Emergency Loan Fund Act, Sections 49-17-81 through 49-17-89, Mississippi Code of 1972, as amended.
- J. Mississippi state purchase law, Title 31, Mississippi Code of 1972, annotated.
- K. Mississippi State Engineering & Surveying Law, Sections 73-13-1 through 73-13-99, Mississippi Code of 1972, annotated, and Rules and Regulations of Procedure promulgated thereunder by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

Part 6, Chapter 6: Mississippi Commission on Environmental Quality Water Pollution Control Revolving Loan Fund Program Regulations (Effective for Projects Funded From 10/1/2000 Through 9/30/2004)

TABLE OF CONTENTS

Rule 6.1 Introductory Provisions

Rule 6.2 Program Requirements

Rule 6.3 Project Requirements

Appendices

- A. Determination of Eligible and Allowable Costs
- B. Environmental Review Process
- C. Procurement Requirements for WPCRLF Loan Recipients
- D. MBE/WBE Requirements
- E. Debarment and Suspension
- F. WPCRLF Loan Recipient Department Disputes Procedures
- G. Waste, Fraud and Abuse
- H. Loan Recipient Accounting and Auditing Requirements
- I. Procurement Protest Procedures
- J. Applicable State and Federal Laws, Regulations and Executive Orders
- K. Defaults and Remedies
- L. Loan Recipient/Contractor Claims and Disputes
- M. Definitions

Rule 6.1 Introductory Provisions.

- A. Scope of Regulations. These regulations, adopted pursuant to Sections 49-17-81 through 89, Mississippi Code of 1972, as amended, shall govern the Mississippi Water Pollution Control Revolving Loan Fund (WPCRLF) Program beginning in federal fiscal year 2001. These WPCRLF regulations may be superceded by the WPCRLF loan agreement and repayment agreement when such a variance is determined prudent by the Executive Director and when not in conflict with any state or federal law, regulation, or executive order.
- B. Federal Equivalence and Cross-Cutter Requirements. Federal regulation 40 CFR 35.3135(f) requires that “equivalency” projects funded under the State Water Pollution Control Revolving Fund must comply with sixteen specific requirements of Title II (the EPA Construction Grants Program) of the Federal Water Pollution Control Act. “Equivalency” projects are generally defined as wastewater projects constructed with funds which equal the amount of the federal grants to the State for this program.

Similarly, 40 CFR 35.3145 requires that the State must also require all recipients of funds which equal the amount of the federal grants to the State to comply with certain other “cross-cutting” federal authorities. Cross-cutting authorities are federal laws and authorities that apply to these projects independent of the federal Water Pollution Act and subsequent amendments.

Since the beginning of this program in FY-89 and continuing through FY-00, the Department has required that all projects receiving loan funding meet federal equivalency and cross-cutter requirements, and has banked the amount of these loan awards in excess of the federal capitalization grants toward meeting equivalency and cross-cutter requirements of future federal capitalization grants. The Department has determined that the amount of loans awarded in excess of the federal capitalization grants through FY-00 should equal or exceed the federal capitalization grants expected for this program from FY-01 and after. Accordingly, the Department has determined that projects funded in FY-01 and after will not be required to meet all federal equivalency and cross-cutter requirements.

These regulations apply to projects that receive loan awards in FY-01 and after. Thus, almost all of these federal equivalency and cross-cutter requirements are excluded from these regulations. However, certain of these requirements have been retained in order to secure a reasonable assurance that the Department funds projects that are environmentally sound, that the loan recipient can construct, operate, and maintain the project and repay the loan, that these public funds are adequately protected and expended only for their intended purpose, and as otherwise required by EPA.

Source: *Miss. Code Ann. §§ 49-17-81 through 49-17-89, 49-2-1, et seq. and 49-17-1, et seq.*

Rule 6.2 Program Requirements.

- A. Eligible Applicant Determination. To be eligible for financial assistance, an applicant must meet the definition of an eligible applicant as described in Appendix M of these regulations, as determined by the Department.
- B. Intended Use Plan (IUP). In each fiscal year for which funds are available in the WPCRLF, the Commission will establish and publish an IUP in conformance with federal requirements. The IUP includes a mechanism developed by the Department to prioritize potential projects for uses of the available funds. The IUP describes the intended use of the funds in the WPCRLF and how the uses support the goals of the program.
- C. Reserves. The Commission may reserve certain percentages of the State's federal Title VI allotment from each fiscal year for administration of the WPCRLF program and for planning under Sections 205(j) and 303(e) of the Act, consistent with the Act and state law. The Commission may also charge administrative fees to loan recipients for administration of the WPCRLF program, as established in each year's IUP.
- D. Public Comment and Review. In accordance with the Act, the Commission will establish and provide for public comment on and review of the annual IUP. The Department may take into consideration any comments prior to adoption of the annual IUP. After adoption by the Commission, modification to these documents may be adopted by the Commission as provided for in the IUP without further public comment and review.
- E. WPCRLF Uses. The fund may be used for the following purposes, or as established in the IUP, for a given fiscal year.
 - (1) To make loans to eligible applicants on the condition that:
 - (a) Such loans are made at or below market interest rates, at terms not to exceed 20 years after project completion, or for such period as may be allowed by federal law.
 - (b) The loan applicant shall establish a dedicated source of revenue for repayment of loans.
 - (c) The fund shall be credited with all payments of principal and interest on all loans.
 - (d) The loan applicant is in compliance with WPCRLF regulations.
 - (2) Under the conditions in (1) above, to refinance the debt obligation of loan recipients when such debt obligations were incurred and construction began on or after such date as established in the IUP for a given fiscal year, and where such projects have complied with the WPCRLF Regulations. The loan applicant agrees that, by pursuing such a refinancing arrangement, it does so at its own risk and thereby relieves the Commission and Department of all responsibility and

liability should costs later be determined unallowable for any reason or should funding not become available for any reason.

- (3) As a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the state if the proceeds of the sale of such bonds will be deposited in the WPCRLF and provided such authority is established in state law.
- (4) For the reasonable costs of administering the WPCRLF program and conducting activities under Title VI of the Act.
- (5) To earn interest on WPCRLF accounts.

F. WPCRLF Financial Assistance.

- (1) The WPCRLF has been established to provide loans to eligible loan applicants for the purpose of funding:
 - (a) Construction of publicly owned treatment works as defined in Section 212 of the Act.
 - (b) Implementation of nonpoint source pollution management programs established under Section 319 of the Act.
 - (c) Development and implementation of estuary conservation and management plans under Section 320 of the Act.
- (2) Basic financial assistance requirements are as follows:
 - (a) Section 212 projects shall be included on the fundable or planning portion of the Priority List in the current year's IUP.
 - (b) Terms of any financial assistance shall be as established in the IUP for the projects to be funded in each fiscal year and shall be further established in the loan agreement.
 - (c) The loan applicant or recipient shall comply with the requirements of the Act, as amended, all applicable state laws, requirements, regulations, and the annual IUP.
 - (d) The applicant must not be in violation of any provisions of a previously awarded WPCRLF, WPCELF or WPALP loan agreement.
 - (e) The applicant must not be in arrears in repayments to the WPCRLF, the WPCELF, the WPALP or on any other loan.

- (f) Funds will not be disbursed to loan recipients until the loan recipient has entered into a WPCRLF loan agreement with the Department.
- (g) The WPCRLF program will provide assistance only to projects that are consistent with any water quality management plans developed under sections 205(j), 208, 303(e), 319 and 320 of the Act as applicable.

G. State Capitalization Grant Application.

After the Commission adopts each annual IUP, the Executive Director may submit the IUP with an application to the appropriate federal agency for any available federal funds.

H. WPCRLF Program Administration.

The WPCRLF Program will be administered by the Commission acting through the Department, in accordance with the Act, applicable federal regulations, state law and these regulations.

I. Responsibility.

The applicant/loan recipient is responsible for compliance with all applicable state and federal laws and regulations, and for the proper planning, design, construction, operation, maintenance, replacement, performance, and fiscal integrity of the project. The Department's approval of any document does not relieve the applicant/loan recipient or any others of any liabilities or responsibilities. Department review and/or approval of any document is for loan eligibility/allowability purposes and does not establish or convey any such liability or responsibility.

J. Other Approvals.

The applicant/loan recipient must obtain approval of all necessary documents from each state, local, and federal agency having jurisdiction over or funding in the project, if so required by that agency.

Source: *Miss. Code Ann.*, §§ 49-17-81 through 49-17-89, 49-2-1, *et seq.* and 49-17-1, *et seq.*

Rule 6.3 Project Requirements. All water pollution control projects funded by the WPCRLF must comply with the following requirements. Non-point source pollution control projects and estuary management projects must comply with these requirements to the extent described in the loan application and loan agreement, as established by the Department.

A. Facilities Planning.

- (1) Preplanning Guidance and Conference. The Department will provide facilities planning guidance to the potential applicant and/or its engineer. The potential loan applicant and/or its engineer should attend a preplanning conference with the

Department as early in the planning process as practical. During the conference the staff will provide information on the required facilities planning documents necessary to comply with these regulations. All facilities plans must be prepared by or under the responsible supervision of a professional engineer registered under Mississippi law.

- (2) Contents of the Facilities Plan. The facilities plan must comply with the Department's guidance, including updates, Appendices A, B and J of these regulations and any other requirements of the Department pursuant to review of the facilities plan. The facilities plan must generally contain the following, as determined appropriate by the Department:
 - (a) A description of the existing water pollution control facilities, if any, owned by the applicant.
 - (b) A description of the existing and/or future water pollution problem or threat to be addressed by the proposed project.
 - (c) Documentation of sufficient flow monitoring and/or estimation to quantify wastewater, infiltration and inflow, applicable effluent limitations, and any other technical data necessary to provide the basis for preliminary engineering design of the project.
 - (d) A description of the proposed facilities, costs, location, and how the proposed facilities will address the existing and/or future water pollution problem or threat identified in the plan.
 - (e) A demonstration that minorities within the jurisdictional boundaries of the loan applicant will not be systematically excluded from the benefits of the proposed projects.
 - (f) A specific indication that each applicable intergovernmental review agency has been contacted regarding the proposed project, any adverse comments from the applicable intergovernmental review agencies, and an indication of all necessary permits and clearances that must be obtained for this project. Intergovernmental review agencies are as follows:
 - (i) Mississippi Department of Archives and History (for archaeological/cultural resources review under the State Antiquities Law)
 - (ii) Mississippi Department of Wildlife, Fisheries, and Parks-Natural Heritage Program (for vegetative/wildlife review under the Nongame and Endangered Species Conservation Act.)
 - (iii) U.S. Army Corps of Engineers, Regulatory Functions Branch (for

Wetlands, Section 10, and floodplain impact review)

- (iv) Mississippi Department of Marine Resources (Jackson, Harrison, and Hancock County Projects only; for Mississippi Coastal Program and applicable Mississippi law review)
 - (v) U.S. Forest Service (projects located in a federally designated Wild and Scenic River Basin only, for federal Wild and Scenic Rivers Act compliance)
 - (g) For projects defined under Section 212 of the Act, a comparative evaluation of the no-action alternative and the proposed alternative, which accounts for beneficial and adverse consequences that each alternative would have on existing and future environmental resources, as required by Appendix B.
 - (h) A financial capability summary using planning level cost estimates.
 - (i) For projects defined under Section 212 of the Act, (1) a copy of the notice to the public of the proposed project and for the opportunity to comment on alternatives and to examine environmental review documents, including the facilities plan and any comments, permits, or clearances from the intergovernmental review agencies, (2) a copy of any comments received from the public, and (3) a description of how all comments were addressed.
 - (j) For projects defined under Section 212 of the Act and determined by the Department to be controversial, (1) a copy of the public hearing notice published in a local newspaper of general circulation providing at least a 30 day advance notice of a public hearing to be held by the loan applicant, (2) a copy of the transcript of the public hearing and (3) a description of how all comments were addressed.
 - (k) Calculations showing the necessary user charges for the project using planning level cost estimates.
- (3) State Environmental Review Process. For projects defined under Section 212 of the Act, prior to approval of the facilities plan, the Department will complete the appropriate portions of the state environmental review process described in Appendix B of these regulations, based upon information provided in the facilities plan.
- (4) Approval of Facilities Plan. The Department will approve the facilities plan after completing any applicable state environmental review process and after determining that all facilities planning requirements appear to be met.

B. Application for WPCRLF Loan.

(1) Preapplication Guidance and Conference.

The Department will provide a loan application package to the potential loan applicant and/or its engineer. The potential loan applicant and/or its engineer may request a preapplication conference with the Department as early in the application process as practical.

(2) Contents of an Application Package. Forms provided by the Department must be used and may not be altered. The WPCRLF loan application may request assistance only for costs that are allowable in accordance with Appendix A of these regulations and may include a construction contingency, as determined by the Department, in the project budget.

The application package must conform to these regulations, and must include the following:

- (a) A WPCRLF loan application form with original signature.
- (b) A draft user charge system and ordinance.
- (c) All proposed or executed contracts for all administration, legal, facilities planning, design, testing, construction observation and any other services. An allowable cost certification must be submitted with each executed contract.
- (d) A procurement certification from the loan applicant and the loan applicant's legal counsel.
- (e) A financial capability summary using the most recent cost estimates, if different from planning estimates.
- (f) Copies of all required intergovernmental review agency permits/clearances, or copies of letters from the appropriate intergovernmental review agencies which state that no permits or clearances are required.
- (g) A legal certification from the loan applicant and the loan applicant's legal counsel.
- (h) A certified copy of a resolution by the loan applicant's governing body which 1) authorizes the submission of the application and 2) designates an authorized representative or office to make application for assistance and to sign documents, on behalf of the applicant, required to undertake and complete the project.

- (i) A copy of all existing or proposed interlocal agreements related to the project, if applicable. Such agreements must be executed by all appropriate parties and must be approved by the Department prior to loan offer.
- (j) All waste disposal permit applications, if not previously submitted.
- (k) All other permits, forms, documents, and supporting information required by the Department.

C. Offer of a WPCRLF Loan.

- (1) Upon determination by the Department that (a) all applicable requirements of the WPCRLF loan application have been met, (b) the facilities plan has been approved, (c) the project is on the current year priority list and (d) funds are available for the amount of the WPCRLF loan application, the Executive Director will execute and transmit a WPCRLF loan offer to the loan recipient. In addition to the estimated allowable project costs as described in Appendix A of these regulations, the loan offer may include a construction contingency, as determined by the Department, in the project budget.
- (2) Upon receipt of the WPCRLF loan offer, the loan recipient must execute and return it to the Department, along with a certified copy of a resolution by the loan recipient's governing body authorizing acceptance of the loan offer, within the time frame established in the WPCRLF loan offer. The loan offer becomes void if not executed and returned within the time frame specified, unless extended by the Executive Director.

D. Design.

- (1) Guidance and Conference.

The Department will provide design guidance to the loan applicant/recipient and/or its engineer, who may request a predesign conference with the

- (2) Plans, Specifications and Contract Documents.
 - (a) The engineer must prepare plans, specifications, and contract documents on all appropriate elements of the project. These documents must conform to Department requirements, to Appendices A, B, C, D, E, and J of these regulations, and to the technical requirements of the Departmental document "State of Mississippi Requirements for the Design of Municipal Wastewater Treatment Facilities," or its successor. Plans, specifications, and contract documents must also conform to such contract language, conditions, and forms as may be required by the Department.

- (b) Contents. In addition to the above, the plans, specifications, and contract documents must minimally contain the following:
- (1) Provisions assuring compliance with these regulations and all relevant federal and state laws.
 - (2) Forms by which the bid bond, performance bond and payment bonds will be provided.
 - (3) A contractor's assurance which must warrant compliance by the contractor with all applicable federal laws and regulations and all laws and regulations of the State.
 - (4) Provisions for the applicant to retain a certain percentage of the progress payments otherwise due to the contractor, in accordance with state law.
 - (5) Provisions requiring the contractor to obtain and maintain the appropriate insurance coverage.
 - (6) Provisions giving authorized representatives of the loan recipient access to all construction activities, books, records, and documents of the contractor for the purpose of observation, audit and copying during normal business and/or working hours.
 - (7) Provisions for compliance with any applicable Minority Business Enterprise/Women Business Enterprise (MBE/WBE) requirements as described in Appendix D of these regulations.
 - (8) Provisions for change orders.
 - (9) Provisions for liquidated damages.
 - (10) Those conditions, specifications, and other provisions set forth or required by the Department.
- (c) Related submittals. The following documents, if applicable to the project, must also be submitted by the deadline in the loan agreement for submission of the plans, specifications, and contract documents, or at other times as may be required by the loan agreement:
- (1) A copy of the issued NPDES permit or the state operating permit, if required.
 - (2) A copy of the issued solid waste disposal permit, if required.

(3) Written waivers from all adjoining property owners when it is not possible to provide required buffer zones, if the project includes wastewater or sludge treatment facilities.

(4) Real Property.

(i) For all loan ineligible real property and easements (including power and other utilities), completion of the applicable and appropriate requirements of state law regarding acquisition of real property, and certification forms from both the loan applicant and the title counsel which indicate that all such loan ineligible real property and easements for the entire project have been secured by at least one of the following actions:

(A) Clear title.

(B) Execution by both parties of a bonafide option to purchase or a lease valid for the expected life of the project.

(C) Initiation of condemnation by filing such action in court.

Prior to advertisement for construction bids, clear title certification forms for all real property and easements from both the loan applicant and the title counsel must be submitted for all loan ineligible real property and easements (including power and other utilities).

(ii) For all loan eligible real property, completion of the appropriate requirements of state law regarding acquisition of real property, an appraisal, and a written request to the Department for approval of the purchase price of all loan eligible real property. Prior to advertisement for construction bids, the loan applicant must secure approval of the purchase price by the Department, must complete purchase of all loan eligible real property and easements, and must submit clear title certificates from the loan recipient and title counsel for all such loan eligible property.

(3) Submittal of Plans, Specifications and Contract Documents.

By the date specified in the loan agreement the applicant must submit complete plans, specifications and contract documents for the entire project to the Department.

- (4) Approval of Plans, Specifications and Contract Documents. The Department will approve the plans, specifications, and contract documents upon determining that these documents:
 - (a) Appear to conform to the requirements of these regulations,
 - (b) Appear to be approvable pursuant to a technical review by the Department, and
 - (c) Appear to be consistent with the approved facilities planning documents and environmental determinations required by these regulations.

E. Construction Bidding and Loan Amendment.

- (1) Within the time frame established in the loan agreement and upon a) approval of the plans, specifications, and contract documents by the Department, b) issuance of any other permits or clearances required for the project, and c) submittal of clear title certificates from the loan recipient and title counsel for all real property and easements required for the project, the loan recipient must then advertise the project for construction bids. All procurement actions by the loan recipient must comply with state law and these regulations.
- (2) Upon receipt of construction bids, the loan recipient must then submit a) the completed MBE/WBE documentation as required by Appendix D of these regulations, b) the completed bid package, c) all necessary executed contracts and amendments as described in Rule 6.3.B(2)(c), and d) a loan agreement amendment request (consistent with as-bid construction costs, a construction contingency as determined by the Department, and any professional services contracts and amendments) to the Department within the time frame established in the loan agreement.
- (3) Upon the receipt of the completed MBE/WBE documentation, bid package, professional services contracts and amendments, and loan agreement amendment request from the loan recipient, the Department will review these documents, determine whether any request for an increased loan amount is justified and allowable and that funds are available and, after determining that all documents are approvable, will transmit to the loan recipient approval to execute the construction contracts.
- (4) After receipt, review and approval of the loan agreement amendment request, the Department will prepare and transmit an amended WPCRLF loan offer to the loan recipient. The loan offer will include in the project budget (a) the approved as-bid

amounts for construction contracts, (b) the amounts for professional services contracts, and (c) a construction contingency as determined by the Department. Upon receipt of the amended WPCRLF loan offer, the loan recipient must execute and return it to the Department within the timeframe established in the offer letter. After execution of the amended WPCRLF loan offer, the WPCRLF loan amount may not be increased except for funding of a subsequent portion of a segmented project as identified in the Intended Use Plan for a later fiscal year. Any increased project costs in excess of the amended WPCRLF loan amount must be paid by the loan recipient from sources other than WPCRLF loan funds.

F. Construction.

- (1) Awarding Construction Contracts and Preconstruction Conference. Upon receipt of the approval to execute the construction contract and issue the notice to proceed, the loan recipient must do so and transmit a copy of the executed construction contract and the notice to proceed to the Department within the time frame specified in the loan agreement.

The loan recipient is responsible for assuring that every appropriate procedure and incidental legal requirement is observed in advertisement for bids and awarding the construction contracts. The plans, specifications, and executed contract documents must not vary from those approved by the Department.

The loan recipient may arrange and hold a preconstruction conference and must allow attendance and participation by the Department if such a conference is held.

- (2) Observation During Construction.

During all times that construction work is being performed, the loan recipient must provide for full-time observation of the project by the engineer or his staff and must require the engineer's assurance that the work is being performed in a satisfactory manner in accordance with the WPCRLF loan agreement and the approved plans, specifications, contract documents and approved change orders. Less than full-time observation may be allowed when properly justified and approved by the Department.

The Department is authorized to observe the construction of any project at any time for compliance with the terms of the loan agreement and to determine if the loan recipient and engineer are assuring that plans, specifications and contract documents are being followed. Such observation will not subject the Department to any legal action for claims, damages or any other liability. Such observation will not release the contractor from any obligation to perform the work in accordance with the requirements of the contract documents or the engineer from determining compliance with the requirements of the contract documents or the loan recipient from insuring compliance with the contract and the terms of the loan agreement.

The contractor, engineer, and the loan recipient must furnish the Department with every reasonable opportunity and means for determining whether the loan recipient and engineer are assuring that the work is in accordance with the requirements of the approved plans, specifications and contract documents. The Department is authorized to observe and require submission by the loan recipient of daily logs, record drawings, file notes, and any other documents prepared in relation to the WPCRLF funded project.

(3) Construction Deficiencies.

- (a) In the event that it appears to the Department that the loan recipient and engineer are not assuring that the construction work, materials, equipment or supplies are in conformity with approved plans and specifications, and contract documents, the Department may determine these items are unallowable for WPCRLF loan participation, unless the loan recipient takes action, through the engineer if applicable, in the manner provided for in the construction contract to correct any such deficiencies.
- (b) The Department may immediately withhold WPCRLF loan payments for such time that it appears that the loan recipient and engineer are not assuring that construction work, materials, equipment or supplies are in accordance with the approved plans, specifications and contract documents, and may require the loan recipient to repay any previously paid amounts related to such work within 30 days of such notification.

(4) Change Orders.

- (a) General. In the event a determination is made by a loan recipient after a construction contract is executed that changes or modifications to the original contract are necessary or would better serve the purpose of the loan recipient, the loan recipient may, at its discretion, execute such change orders pertaining to the construction that are necessary under the circumstances, as provided in the contract documents and when in accordance with state law.

Change orders must not change, vary, or alter the basic purpose or effect of the project. Change orders must be technically adequate, the costs must be necessary and reasonable, and eligible/ineligible costs must be appropriately separated.

- (b) Change Order Submittals. After completion of the change order negotiation process and/or claims resolution between the loan recipient and the contracting party, an executed change order must be submitted to the Department for review and approval, in order to obtain a WPCRLF loan eligibility/allowability determination.

If any change order is submitted to the Department that is not complete and executed by the loan recipient, the contracting party, and the engineer if appropriate, the Department may return such change order without review. However, unilateral change orders executed by the loan recipient, and the engineer if appropriate, and identified as such, that are issued in accordance with the contract documents may be submitted to the Department for review and approval, in order to obtain a WPCRLF loan eligibility/allowability determination.

The loan recipient may submit a complete change order which has been executed conditional upon a WPCRLF loan eligibility/allowability determination by the Department.

If possible, approval of a change order should be secured from the Department before the work is started. Approval may also be secured after the work is started; however, the loan recipient must bear the cost if the work is later determined to be ineligible or unallowable.

When the eligible cost of a project will be significantly reduced by a change order(s), the Department may issue an amendment to the loan agreement decreasing the loan amount, and the loan recipient must execute the amendment within the time frame established by the Department.

- (c) Department Review. In order to allow the Department to perform a technical and loan allowability review, requests for change order approvals must conform to Department guidance, requirements and regulations.
- (d) Time Extensions. Change orders which include time extensions exceeding 30 days beyond the original contract completion date, and/or documentation that the loan recipient is implementing all legal remedies provided in the contract documents for failure to complete construction when required, must be submitted to the Department as specified in Rule 6.3.F(6)(i) of these regulations. Justification for contract time extensions included in a change order must be prepared, but need not be submitted to the Department unless the total time extensions for the contract exceed 30 days after the original contract completion date, in which case justification for all time extensions must be submitted to the Department for an allowability determination.
- (5) Contractor Bankruptcy or Default. In the event of a contractor bankruptcy or default, any proposed agreements with the bonding company (other than the bonding company serving as general contractor or hiring another contractor acting

as their agent) must be submitted for a WPCRLF loan allowability determination by the Department prior to execution.

If the loan recipient determines that re-award of the construction contract or a portion thereof is necessary due to contractor bankruptcy or default, such proposed re-award contracts must be submitted for a WPCRLF loan allowability determination by the Department prior to execution. The loan recipient will be responsible for assuring that every appropriate procedure and incidental legal requirement are observed in advertising for bids or otherwise re-awarding a construction contract, if this course of action is taken.

- (6) Design and Construction Phase Submittals, Approvals, and Actions. The following submittals, approvals, and actions will be required during the design and construction phase of the project. The Department may establish additional time frames within the loan agreement.
- (a) By the date established by the Department in the loan agreement, the loan recipient must submit a complete set of plans, specifications and contract documents to the Department.
 - (b) Within 90 days after approval of the plans, specifications, and contract documents by the Department, (1) all construction related contracts must be advertised for bids and proof of such advertisement must be submitted, (2) all local funds necessary for the project must be secured and proof of such local funds must be submitted, and (3) clear title certificates from the loan recipient and title counsel for all loan eligible real property must be submitted.
 - (c) Within 120 days after approval of the plans, specifications, and contract documents by the Department, the loan recipient must receive bids on all construction contracts.
 - (d) Within 14 days after receipt of bids, the loan recipient must submit all MBE/WBE and related documents.
 - (e) Within 21 days after receipt of bids, the loan recipient must submit all bid packages.
 - (f) Within 60 days after receipt of bids, the loan recipient must execute all construction contract documents, must submit a copy of all executed contract documents, and must issue and submit a copy of the notice to proceed on all such contracts.
 - (g) By the date established by the Department in the loan agreement (which is based upon 90% of construction contract time) the loan recipient must enact the approved user charge system and submit a copy of the enacted

ordinance to the Department.

- (h) Within 10 days after construction completion of each construction contract, the loan recipient must notify the Department of construction completion.

The Department will perform a final construction observation within 30 days after the current construction contract completion date, unless further delayed by the Department pursuant to review of the loan recipient's request and justification for such delay. Should the Department decide that the construction completion is being unreasonably delayed, a final construction observation may be immediately performed by the Department. The final construction observation by the Department is only for the purpose of determining final loan allowable costs.

- (i) Within 30 days after the current construction contract completion date, all change orders which include time extensions exceeding 30 days beyond the original contract completion date, and/or documentation showing the loan recipient is implementing all legal remedies provided in the contract documents for failure to complete construction when required, must be submitted to the Department for an allowability determination.
- (j) Within 30 days after the Department's final construction observation, the loan recipient must submit: final loan payment requests, approvable summary change orders for all construction contracts; record drawings for the entire project funded in whole or in part with WPCRLF funds; the engineer's certification of compliance with plans, specifications, and contract documents; final professional services contract amendments, if any; and all other administrative forms and documents required by the loan agreement. **Loan payment requests submitted after this date are not allowable, regardless of when the costs were incurred.**
- (k) Any other submittals or actions required by the loan agreement must be performed when required and are subject to review and approval by the Department.

G. Post Construction Phase.

- (1) Following final payment of WPCRLF loan funds to the loan recipient, or upon expiration of any deadlines established by the loan agreement or the Department, the Department or other designated parties may perform an audit of the WPCRLF loan project for the purpose of determining compliance with the WPCRLF loan agreement and to determine final allowable costs, payments made to date, and any additional payments due the loan recipient or repayment due the Department.

- (2) Upon completion of the WPCRLF audit (or if an audit is not performed, following approval of the final payment request of WPCRLF loan funds to the loan recipient or upon expiration of any deadlines established by the loan agreement or the Department), the Department will transmit to the loan recipient a copy of the audit report, if performed, and a final determination of allowable costs and payments due the loan recipient or repayments due the State. The final determination will also establish a 30-day appeal deadline, as required by (3) below, and will require repayment of any overpayments with an interest penalty to begin accruing on the appeal deadline.
- (3) Within 30 days after the date of the above final determination, the loan recipient may submit a written appeal of the final determination, including a written justification of the reason for the appeal, and supporting documentation for any disputed costs of the final determination. Otherwise, the final determination of allowable costs will become the final allowable costs for purposes of WPCRLF loan payments and the WPCRLF loan agreement.
- (4) Should an appeal be submitted, the disputes procedures established in Appendix F of these regulations will be followed in order to resolve the dispute and establish the final allowable costs.
- (5) Upon expiration of the final determination appeal period, or upon resolution of a dispute of the final determination, the Department will transmit to the loan recipient a final WPCRLF loan agreement between the loan recipient, the Department, and the State Tax Commission. The loan recipient must execute and submit the final loan agreement to the Department within the deadline established by the Department.
- (6) Upon receipt of an executed final loan agreement from the loan recipient, the Department will transmit the final loan agreement to the State Tax Commission for execution and return to the Department.
- (7) Upon receipt of the executed final loan agreement from the State Tax Commission, the Department will transmit a copy to the loan recipient. Repayment of the WPCRLF loan will commence under the terms of the executed final loan agreement.
- (8) If the project fails to perform properly at any time within the first year after the final construction observation performed by the Department, the loan recipient must immediately notify the Department of the reasons for lack of performance, submit an approvable schedule of corrective actions, and implement the corrective actions in accordance with the approved schedule.

H. Payments to WPCRLF Loan Recipients. Payments from the WPCRLF may be made under the following conditions:

- (1) Payments may only be requested by and made to loan recipients, in accordance with the WPCRLF loan agreement and the loan recipient's executed and approved contracts for eligible and allowable services and construction, for work performed within the project scope and budget period.
- (2) Payments may be requested no more often than on a monthly basis, except as allowed by the Department.
- (3) The loan recipient must deduct from all WPCRLF payment requests the amount of funds provided or to be provided from all other state and federal agency funding sources for allowable WPCRLF project costs.
- (4) Payment requests must be submitted by the loan recipient to the Department and must include the following:
 - (a) WPCRLF payment request form.
 - (b) Cumulative invoices, in accordance with the contracts for such work, for all costs for which payment is requested.
 - (c) Any other documents required by the loan agreement.
- (5) The timing of WPCRLF payments to the loan recipient will be as follows, provided the loan recipient is in compliance with the requirements of these regulations and provisions of the WPCRLF loan agreement:
 - (a) Upon execution of the loan agreement all incurred facilities planning and application costs may be requested and paid. No further payments may be requested and paid except as allowed below.
 - (b) Payments for eligible land may be requested and paid immediately after loan agreement execution, if the Department has approved the purchase price and the loan recipient has submitted a bonafide option to purchase.
 - (c) Upon (1) approval of all plans, specifications, and contract documents, and (2) submittal of clear site certificates from the loan recipient and title counsel for all loan eligible and ineligible real property, costs incurred to date in accordance with the contracts for administration, engineering, legal, and any other professional services may be requested and paid. No further payments may be requested and paid except as allowed below.
 - (d) Upon receipt by the Department of all executed construction contract documents and notices(s) to proceed, costs incurred in accordance with the contracts for administration, engineering, legal, and any other professional services may be requested and paid.

- (e) Payments for allowable construction work may be requested and paid based upon in-place work or delivered materials and equipment as specified in the construction contract and as supported by invoices and verified as accurate by the engineer and loan recipient, less any retainage.
 - (f) No more than 95% of all construction phase costs will be paid until submission of the determination of construction completion; performance of the final construction observation by the Department; submission of the final pay request; submission of approvable summary change orders on all construction contracts; submission of record drawings on all construction contracts; submission of the engineer's certification of compliance with plans, specifications and contract documents; submission of loan recipient's resolution of acceptance of each construction contract; submission of final professional services contract amendments, if any, and compliance with all other applicable provisions of the WPCRLF loan agreement. Upon completion of these actions, the remainder of all costs may be paid.
- (6) Any payments made to the loan recipient which are at any time determined by the Department to be for costs not in accordance with the WPCRLF loan agreement, for ineligible or unallowable costs, or for costs apparently related to waste, fraud, abuse or illegal acts under state or federal law, must be repaid to the WPCRLF fund within 30 days of such notification by the Department. Interest may be charged on such delinquent repayments after expiration of the 30-day period at a rate of ten (10) percent per annum, compounded monthly. Alternatively, the Department may withhold such amounts including interest from subsequent payment requests.

I. WPCRLF Loan Repayment Requirements. All WPCRLF loan repayments are subject to the following requirements:

- (1) Interest on amounts paid to the loan recipient will commence on the latest original construction contract completion date, or one year after initiation of the earliest construction contract, whichever occurs first.
- (2) The amount of interest accrued between the date established in (1) above and the initiation of the repayment process will be added to the final allowable project costs to determine the principal amount to be repaid by the loan recipient.
- (3) The term of the loan repayment will be from the time of transmittal of the final loan agreement to the loan recipient to the end of the term as established in the IUP under which the project is funded, or a reduced term if requested by the loan recipient.
- (4) Repayments shall be made on a monthly basis and shall commence when determined by the Department. Repayments shall be made through monthly

withholding of sales tax reimbursements or homestead exemption tax loss reimbursements in accordance with state law, if the amount of such reimbursement is sufficient to make the monthly payment. Otherwise, repayment shall be made by submission of monthly payments directly to the State.

- (5) The repayment interest rate and the frequency of interest compounding will be as established in the IUP under which the project is funded.

- J. **Administrative Fee.** An administrative fee in the amount of five percent (5%) of the final loan principal amount will be collected from the loan repayment amounts to defray the costs of administering the WPCRLF program. Beginning with the initiation of the repayment process and until such time that the total administrative fee is collected, the interest portion of each repayment will not be charged, and, in lieu of the interest portion, an equal amount of the repayment will be collected as the administrative fee.

Source: *Miss. Code Ann.*, §§ 49-17-81 through 49-17-89, 49-2-1, *et seq.* and 49-17-1 *et seq.*

APPENDIX A

Determination of Eligible and Allowable Costs

CONTENTS

- A. General
- B. Professional Services
 - (1) Allowable
 - (2) Unallowable
- C. Construction
 - (1) Allowable
 - (2) Unallowable
- D. Equipment, Materials, and Supplies
 - (1) Allowable
 - (2) Unallowable
- E. Change Orders
- F. Claims
 - (1) Allowable
 - (2) Unallowable
- G. Mitigation
 - (1) Allowable
 - (2) Unallowable
- H. Publicly Owned Onsite Systems
 - (1) Allowable
 - (2) Unallowable
- I. Real Property and Existing Improvements
 - (1) Allowable
 - (2) Unallowable
- J. Miscellaneous Costs
 - (1) Allowable
 - (2) Unallowable
- K. Project Income From Bid Bond Forfeitures, Liquidated Damages, and Interest on WPCRLF Loan Payments

A General

Eligible costs are those costs in which WPCRLF loan participation is authorized pursuant to applicable statute. Allowable costs are eligible costs that meet the following general criteria in addition to any specific identification as an allowable cost within Appendix A:

- (1) Are necessary and reasonable for the proper and efficient administration and construction of the project, be allocable to the project, and not be a general expense required to carry out the overall responsibilities of the loan recipient.
- (2) Are authorized or not prohibited under state or local laws or regulations.
- (3) Conform to any limitations or exclusions set forth in state laws or other governing limitations as to types or amounts of cost items.
- (4) Are consistent with policies, regulations, and procedures that apply uniformly to both state assisted and other activities of the loan recipient.
- (5) Are accorded consistent treatment through the application of generally accepted accounting principles appropriate to the circumstances.
- (6) Are not allocable to, or included as, a cost of any other federally or state financed program in either the current, prior, or future period.
- (7) Are determined allowable by the Department after review of necessary books, records and other documents related to the costs. Failure to cooperate with the Department regarding access to project records or refusal to provide such records when requested by the Department may result in costs being determined unallowable for WPCRLF participation.
- (8) Are within the scope and budget period of the project as described in the loan agreement.
- (9) Are determined without regard to any previous federal grant, WPALP, WPCRLF or WPCRLF loan funding provided for facilities to be replaced, upgraded, or rehabilitated, except as described in Rule 6.2.F.(2)(d) and (e) of these regulations.
- (10) Notwithstanding this appendix, are eligible and allowable under the federal Clean Water Act and any implementing federal regulations.
- (11) Are procured in accordance with Appendix C.

B. Professional Services

The term professional services refers to engineering, legal, administrative, and similar

services.

- (1) Allowable costs include:
 - (a) Costs that are normally included in the fringe benefits and indirect cost of the firm except those costs specifically excluded in these regulations.
 - (b) Profit, not to exceed the amount normally charged by the firm for similar work.
 - (c) Preparing the facilities plan.
 - (d) Preparing the plans, specifications, and contract documents, including value engineering.
 - (e) Preparing the loan application package.
 - (f) Costs associated with the acquisition of real property, permanent and temporary construction easements and compliance with the requirements of the Mississippi Real Property Acquisition Policies Law.
 - (g) The costs of services incurred during the advertisement, award and construction of a project.
 - (h) The costs associated with acquiring minority and women's business services.
 - (i) The costs of legal, engineering, and other services incurred by the loan recipient in deciding procurement protests and defending their decisions in protest appeals under Appendix I are allowable regardless of the outcome of the protest, provided there was not an attempt by the loan recipient to violate or circumvent state purchase laws.
 - (j) The cost of developing an operation and maintenance manual.
 - (k) Start-up services for onsite training of operating personnel in operation and control of specific treatment processes, laboratory procedures, and maintenance and records management.
 - (l) Administrative services associated with the construction of the project and administering the WCPRLF loan.
 - (m) The cost of services, other than engineering services during construction, such as railway or highway flagmen, or utility or highway inspectors, required during the construction of the project, are allowable provided that:

- i. The entity responsible for the affected railway, highway, or utility requires such services for all parties conducting similar types of work, regardless of the source of construction funding for the project, or the services are required by law.
 - ii. The cost of such services has not been included in the construction contractor's bid price.
- (n) Engineering services or other services necessary to correct omissions in the facilities plan, design drawings and specifications or other documents to the extent that such costs would have been allowable for preparing omission free documents.
- (2) Unallowable costs include:
 - (a) Engineering services or other services necessary to correct defects in the facilities plan, design drawings and specifications, or other documents.
 - (b) Public liaison services.
 - (c) Bad debt.
 - (d) Entertainment costs.

C. Construction

Eligible projects may include treatment works, nonpoint source management projects, and estuary conservation and management projects.

- (1) Allowable costs include:
 - (a) The costs of contracts for allowable construction work on the project, including prime contracts, subcontracts and the direct purchase of equipment, materials and supplies by the loan recipient.
 - (b) The costs of sewer system rehabilitation (including rehabilitation of allowable service lines) necessary to eliminate or prevent infiltration/inflow, bypasses or overflows, or to provide proper operation of the treatment works.
 - (c) The cost of treatment works capacity adequate to transport and treat infiltration/inflow that will remain in the system.
 - (d) Treatment works which serve industrial or commercial users when such works are publicly owned.

- (e) Reserve capacity within a design period of up to twenty years (forty years for interceptors, including pump stations and force mains serving as interceptors).
- (f) Implementation of a nonpoint source management program established under Section 319 of the Act and development and implementation of an estuary conservation and management plan under Section 320 of the Act.

On projects which are also designed to provide for drainage, flood control, or any purposes other than control of pollutants or estuary conservation, only the portion of the project needed for control of pollutants or estuary conservation shall be allowable.

- (g) Construction of treatment and transportation facilities for control of pollutant discharges from a separate or combined storm sewer system.

On such projects which are also designed to provide for drainage, flood control, or any purposes other than control of pollutants, only the portion of the project needed for control of pollutants is allowable.

- (h) The cost associated with the preparation of the project site before, during and, to the extent provided in the loan agreement, after construction. These costs include:

- (i) The cost of demolition of existing structures on the project site if construction cannot be undertaken without such demolition. Demolition of existing structures on the project site when not required for constructing the project, will be considered to be an allowable cost only if the existing structures constitute a real and present hazard to safety, public health, or water quality which can best be abated by the removal of the existing structures.
- (ii) The cost of removal, relocation or replacement of utilities, provided the loan recipient is legally obligated to pay for such by law.
- (iii) The cost of restoring streets and rights-of-way to their original condition. The need for such restoration must result directly from the construction and is generally limited to repaving the width of trench.
- (iv) For wastewater collection projects which provide sewers to existing buildings, service lines between the public sewer and the point five (5) feet from the outside wall of existing residences and

public buildings are allowable. Service lines between the public sewer and the property line of existing businesses are allowable.

(2) Unallowable costs include:

- (a) Construction and construction related costs which occur more than 30 days after the current allowable completion date are not allowable unless the Department determines that the loan recipient is implementing all legal remedies provided in the contract documents for failure to complete construction when required.
- (b) Treatment works which serve federal users exclusively or almost exclusively.
- (c) Bonus payments for completion of construction before a contractual completion date unless required by state law.

D. Equipment, Materials, and Supplies

(1) Allowable costs include:

- (a) The cost of a reasonable inventory of laboratory chemicals and supplies necessary to initiate plant operations and laboratory items necessary to conduct tests required for plant operation.
- (b) The costs for purchase and/or transportation of biological seeding materials required for expeditiously initiating the treatment process operation.
- (c) The cost of shop equipment installed at the treatment works necessary to the operation of the works. The need will depend on the specific item, its frequency of expected use, and the size and complexity of the treatment facility. Larger treatment facilities will have a greater need for installed shop equipment than smaller ones. Where the proposed items of equipment are inappropriate to the size and/or complexity of the treatment works, the Department may determine that the proposed equipment is unallowable.
- (d) The costs of necessary and reasonable safety equipment, provided the equipment meets applicable federal, state, local or industry safety requirements.
- (e) The costs of necessary and reasonable collection system maintenance equipment.
- (f) The cost of mobile equipment necessary for the operation of the overall

wastewater treatment facility, transmission of wastewater or sludge, or for the maintenance of equipment. These items include:

- (i) Portable stand-by generators.
 - (ii) Large portable emergency pumps to provide “pump-around” capability in the event of pump station failure or pipeline breaks.
 - (iii) Sludge or septage tankers, trailers, and other vehicles having as their sole purpose the transportation of liquid or dewatered wastes from the collector point (including individual or onsite systems) to the treatment facility or disposal site.
 - (iv) Tillage, planting, landspreading and harvesting equipment that is documented as necessary and reasonable for land treatment process and other vehicles demonstrated necessary to the facility and approved in advance by the Department.
- (g) Replacement parts identified and approved in advance by the Department as necessary to assure uninterrupted operation of the facility, provided they are critical parts or major systems components which are:
- (i) not immediately available and/or whose procurement involves an extended “lead-time,” or
 - (ii) identified as critical by the equipment supplier(s), or
 - (iii) critical but not included in the inventory provided by the equipment supplier(s).
- (h) Wastewater and drinking water flow metering devices used for wastewater billing purposes.
- (i) The cost of furnishings, office equipment, and maintenance equipment dedicated solely to the pollution control project. Necessary and reasonable office furnishings and equipment include chairs, desks, file cabinets, typewriters, coffee tables, telephones, office supplies, calculators, copiers, book cases, shelves and lamps. Ordinary site and building maintenance equipment such as lawnmowers, rakes, shovels, brooms, picks, hedge trimmers, and other such equipment. Hand tools such as screw drivers, pliers, socket wrenches, electric drills or saws, etc.
- (j) Computers. Computers, display monitors, and computer software which are designed into the control system for the daily operations of the treatment works.

Computers are also allowable if they are to be used for the operational control and analysis of the treatment works. Examples of such allowable uses include the scheduling of equipment maintenance and replacement, the operation of the loan recipient's pretreatment program, including the scheduling of tests to verify industrial compliance with pretreatment requirements, and for accounting and billing services.

The cost of computer software specifically designed for the operation and maintenance of the treatment works is also allowable for loan participation. This includes the cost of developing unique operation programs for the specific loan funded project.

(2) Unallowable costs include:

- (a) The costs of equipment or material procured in violation of Appendix C.
- (b) The cost of vehicles for the transportation of the loan recipient's employees, including buses, trucks, cars, motorcycles, golf carts, bicycles, etc.
- (c) Items of routine "programmed" maintenance such as ordinary piping, air filters, couplings, hoses, belts, etc.
- (d) Radios, televisions, VCRs, camcorders, and other items of a similar nature.
- (e) Large stocks of laboratory and other chemicals and supplies above a reasonable inventory necessary to initiate plant operations.

E. Change Orders

(1) Change order costs are allowable provided they are:

- (a) Necessary and reasonable.
- (b) Within the scope of the project.
- (c) Not caused by the loan recipient's mismanagement.
- (d) Not caused by the loan recipient's vicarious liability for the improper actions of other.
- (e) In conformance with the WPCRLF regulations.

(2) Provided the above requirements are met, the following costs are allowable change orders.

- (a) Construction costs resulting from defects in the plans, design drawings and specifications or other contract documents only to the extent that the costs would have been incurred if the contract documents on which the bids were based had been free of the defects and excluding the costs of any rework, delay, acceleration or disruption caused by such defects.

If the defect is realized after substantial construction work has been completed, and therefore required rework, delay, or additional work beyond that which would have been required by defect free drawings, the cost would still be allowable, but the additional cost of rework or delay is unallowable.

The additional cost is measured as the difference between the cost which would have been included in the bid based on defect free drawings and the actual cost of the change order.

- (b) Equitable adjustments for differing site conditions.

F. Claims

- (1) Allowable costs, provided the costs are properly documented, incurred and requested prior to the end of the 30 day period established by Rule 6.3.F.(6)(e) of these regulations, include:

- (a) The costs of legal, engineering, and other services incurred by the loan recipient in deciding procurement protests and defending their decisions in protest appeals under Appendix I are allowable regardless of the outcome of the protest, provided there was not an attempt by the loan recipient to violate or circumvent state law.
- (b) The costs of assessing the merits of, negotiating, or defending against a claim against the loan recipient are allowable, regardless of the outcome, provided that the matter under dispute is not the result of fraudulent or illegal actions or mismanagement on the part of the loan recipient.
- (c) Amendments or change orders in construction, engineering, legal, etc., contracts as a result of settlements, arbitration awards, or court judgments are allowable to the same extent that they would have been allowable had there not been a claim.

- (2) Unallowable costs include:

- (a) Claims arising from work outside the scope of the loan.
- (b) Claims resulting from fraudulent or illegal activities.

- (c) Claims resulting from mismanagement by the loan recipient.
- (d) Claims resulting from the loan recipient's vicarious liability for the improper action(s) of others.
- (e) The cost of settlements, arbitration awards or court judgments over and beyond the allowable costs had there not been a claim, as established in these regulations.

G. Mitigation

(1) Allowable costs include:

- (a) Costs necessary to mitigate only direct, adverse, physical impacts resulting from construction of the project.
- (b) The costs of reasonable site screening necessary to comply with facilities plans and necessary to screen adjacent properties.
- (c) The cost of groundwater monitoring facilities necessary to determine the possibility of groundwater deterioration, depletion or modification resulting from construction of the project.

The extent of the allowable costs for groundwater monitoring facilities is decided on a case-by-case basis and depends on the size and complexity of the project and the present and potential future use of the groundwater.

(2) Unallowable costs include:

- (a) The costs of solutions to aesthetic problems, including design details which require expensive construction techniques and architectural features and hardware, that are unreasonable or substantially higher in cost than approvable alternatives and that neither enhance the function or appearance of the treatment works nor reflect regional architectural tradition.
- (b) The cost of land acquired for the mitigation of adverse environmental effects identified pursuant to an environmental review.

H. Publicly Owned Onsite Systems

(1) Allowable costs include:

- (a) The cost of major rehabilitation, upgrading, enlarging, and installation of onsite systems.

Major rehabilitation may include the demolition and removal of an existing privately or publicly owned onsite system in accordance with Section C(1)(h)(i) of this appendix.

- (b) Collection or service lines to an offsite treatment unit which serves a cluster of buildings.
- (c) The cost of restoring individual system construction sites to their original condition.

(2) Unallowable costs include:

- (a) Those portions of treatment works which have surface discharges from individual residences or clusters, unless each discharge has a valid NPDES permit.
- (b) Modification to physical structure of homes, commercial buildings, or any other structures which are not a part of the public treatment works project.
- (c) Wastewater generating fixtures such as commodes, sinks, tubs, and drains.

I. Real Property and Existing Improvements

(1) Allowable costs include:

- (a) The cost of land that will be an integral part of the treatment process, such as for land treatment facilities, acquired in accordance with the Mississippi Real Property Acquisition Policies Law in fee simple title or by easement. Except as allowed under Section I.(2) below, such land must be acquired at fair market value based on an appraisal or a condemnation proceeding, unless the purchase price of a parcel is \$10,000 or less. These costs include:
 - (i) The cost of a reasonable amount of land acquired for the construction of land treatment works, considering the need for buffer areas, berms, and dikes. Buffer areas may be designed as part of the project to conform with Mississippi Environmental Quality Permit Board regulations, to screen sites from public view, to control public access, and to improve aesthetics.
 - (ii) The cost of land acquired for land application of sludge, composting or temporary storage of compost residues which result from wastewater treatment.
 - (iii) Where properties are only partially acquired for project purposes,

necessary compensation of property owners for the reduced value of their remaining land.

- (b) The cost of acquiring all or part of an existing publicly or privately owned wastewater treatment works and necessary land for a consolidation project, provided all of the following criteria are met:
 - (i) The acquisition, in and of itself, considered apart from any upgrade, expansion or rehabilitation, provides new pollution control benefits;
 - (ii) The primary purpose of the acquisition is not the reduction, elimination, or redistribution of public or private debt; and
 - (iii) The acquisition does not circumvent federal, state or local requirements.
- (c) The cost of complying with the requirements of the State's Real Property Acquisition Policies Law.

(2) Unallowable costs include:

- (a) For parcels costing over \$10,000, any amount paid by the loan recipient for allowable land in excess of fair market value, based on an appraisal or any condemnation proceeding.
- (b) For parcels costing over \$10,000, an amount other than the determination of fair market value may be found allowable through an administrative settlement if the loan recipient provides sufficient written documentation to the Department that it is reasonable, prudent and in the public interest, such as when negotiated purchase is unsuccessful and condemnation action may entail a long delay or excessive costs. Documentation may include evidence of purchase negotiations, real property sales data, estimated court settlement and legal costs based on previous condemnation proceedings.
- (c) The cost of land acquired for the mitigation of adverse environmental effects identified pursuant to an environmental review.

J. Miscellaneous Costs

(1) Allowable costs include:

- (a) On force account projects, the costs of equipment, materials and supplies necessary for the project.

- (b) Unless otherwise specified in these regulations, the costs of meeting specific legal requirements directly applicable to the project.
- (c) Costs for necessary travel directly related to accomplishment of project objectives, such as costs of loan recipient employees attending training workshops/seminars that are necessary to provide instruction in administrative, fiscal or contracting procedures required to complete the construction of the treatment works.
- (d) Cost of royalties for the use of, or rights in, a patented process or product.

Royalties associated with the procurement of the right to use, or the rights in, a patented product, apparatus, or process are allowable costs, provided that they are based on a published fee schedule or on reasonable fees charged to other users under similar conditions.

- (e) Buildings

Allowable costs for buildings include those portions of the buildings which are directly related to the project, including buildings housing equipment and unit processes, laboratories; employee locker rooms; workshop areas, storage facilities for operational supplies, spare parts and equipment; necessary lavatory facilities, operator office space; etc. Those portions of an administration building which are not necessary for the daily operation and maintenance of the project are unallowable costs, including portions of the building used for public works functions (other than wastewater treatment), general accounting functions, conference rooms with associated audio-visual equipment, or other general uses not necessary for the operation of the project. Where larger facilities include conference rooms to be used exclusively for training of employees, such space is allowable if reasonable and if approved by the Department as part of the loan award.

Where unallowable building space is included in an otherwise allowable administration building, the allowable cost is determined by using the ratio of allowable floor space divided by the total floor space in the building. The costs of buildings and portions of buildings which are unallowable are to be deducted from the allowable project construction costs for loan computation purposes. Costs associated with unallowable buildings and portions of buildings (e.g., landscaping, driveways, parking spaces, electrical service, and other utility costs) are also unallowable and must be deducted proportionately from the allowable construction costs.

- (f) Facilities For Income Generation from Processed Sludges and Crops
Facilities which have the potential for generating project income to offset O&M costs are allowable if they are necessary to provide stabilized and

processed sludges which are to be managed for income generation or crops which are grown for sale as an integral part of the wastewater land treatment or sludge utilization process.

Facilities and equipment built for processing crops grown on land to which sludge or wastewater has been applied may be an allowable cost if the recipient has all financial interest in the crop and if those facilities are necessary and reasonable to prepare the crop for prompt delivery to its market.

Facilities built for processing crops or sludge into marketable products such as compost or heat-dried pellets may be allowable if those facilities are necessary and reasonable to cost-effectively prepare the product for prompt delivery to its market. Facilities to store the marketable products to get more favorable prices, to transport the product for sale to a market, or to optimize marketing of the product, such as bagging operations, are also allowable.

(2) Unallowable costs include:

- (a) Ordinary operation expenses of the loan recipient including salaries and expenses of the loan recipient's employees and elected and appointed officials and preparation of routine financial reports and studies.
- (b) Administrative, engineering and legal activities associated with the establishment of departments, agencies, commissions, regions, districts or other units of government.
- (c) Approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project and the interest on them.
- (d) Personal injury compensation or damages arising out of the project.
- (e) Fines and penalties due to violations of, or failure to comply with, federal, state or local laws, regulations or procedures, and related legal expenses.
- (f) Costs outside the scope or budget period of the approved project.
- (g) Costs for which payment has been or will be received from another state or federal source.
- (h) If a treatment works includes any reserve capacity which induces development on environmentally sensitive lands such as wetland, flood plains, etc, the cost of the entire treatment works will be unallowable.
- (i) Operation and maintenance costs of the treatment works.

- (j) Lease payments.
- (k) Periodic payment of royalties for the right to operate under a patent is considered an operational cost and is unallowable for loan participation.

K. Project Income From Bid Bond Forfeitures, Liquidated Damages, and Interest on WPCRLF Loan Payments:

- (1) Bid bond forfeitures shall have no effect on the determination of allowable and unallowable costs.
- (2) Liquidated damages shall have no effect on the determination of allowable and unallowable costs, except as required by Section C.(2)(a) of this Appendix.
- (3) Interest income on WPCRLF payments to loan recipients shall have no effect on the determination of allowable and unallowable costs.

APPENDIX B

State Environmental Review Process [For Projects Defined Under Section 212 of the Act]

A. Facilities Plan Description of Environmental Impacts

Each project's facilities plan must contain a comparative evaluation of the no-action alternative and the proposed alternative which accounts for the beneficial and adverse consequences to the existing and future environmental resources as follows and any corresponding mitigative measures necessary to protect these resources:

- (1) Surface and groundwater resources.
- (2) Archaeological/historical/cultural resources.
- (3) Vegetative/wildlife resources.
- (4) Wetlands and navigable waterways.
- (5) Floodplains.
- (6) Coastal zones.
- (7) Wild and scenic rivers.
- (8) Air Quality.

B. Environmental Review.

The information, processes, and premises that influence an environmental determination are as follows. The Department will take one or more of the following actions pursuant to the review of the facilities plan description of environmental impacts and any comments generated by the Intergovernmental Review Agencies:

- (1) Finding of No Significant Impact on the Environment.

The Department will issue a Finding Of No Significant Impact (FONSI) when, based upon review of the facilities plan and any intergovernmental review agency comments, it appears that a project will not have a significant adverse environmental impact.

- (2) Environmental Impact Statement.

If the Department determines that the project does not qualify for a FONSI, an Environmental Impact Statement (EIS) will be prepared in general conformance with EPA regulation 40 CFR Part 6, or as deemed appropriate by the Department.

- (3) Amendments.

Amendments are occasionally needed to describe changes to proposed facilities that have already been described in a FONSI or EIS. The Amendment will describe the changes and any expected new impacts on the environment due to the

changes.

(4) Reaffirmation of an Environmental Action.

If five years will pass between the issuance of a FONSI, EIS or Amendment and the offer of WPCRLF funding, the environmental impact of the project will be reevaluated. If there have been no significant changes, the Department will issue a reaffirmation of the environmental action. If the original environmental action cannot be reaffirmed, the Department will issue a new environmental action, as appropriate.

(5) No Further Action.

The Department will issue a FONSI or EIS for all WPCRLF projects. If there are significant changes in the project after the issuance of the environmental document, those changes will be described in an Amendment. Some changes are minor, however, and the Department may determine that a separate Amendment need not be issued. Such minor changes may include, but are not limited to:

- (a) Changes in the size of pump stations, force mains, interceptor sewers, or collection sewers.
- (b) Minor changes in the size of wastewater treatment unit processes.
- (c) Minor rerouting of sewer lines when the new route will not adversely affect cultural resources, habitats of endangered or threatened species, environmentally important natural resource areas, or other environmental resources. All affected property owners must be notified of the rerouting by the loan recipient and must be provided an opportunity to comment on the proposed rerouting prior to initiation of construction.

C. Issuance of the Environmental Action.

Copies of all environmental actions will be provided to the appropriate intergovernmental review agencies listed in Rule 6.3.A.(2)(f) of this regulation. Copies of environmental actions will also be sent to any agency, group or individual requesting them. All environmental actions will also be published in an appropriate local newspaper.

All environmental actions will provide for at least a thirty day period from the date of publication to receive comments from agencies groups, or individuals. All such comments will be evaluated by the Department before finalizing any environmental action.

D. Resolution of Adverse Comments.

Adverse comments received as a result of the environmental review process will be

addressed in the following manner:

- (1) The Department will first require the loan recipient to attempt to resolve the adverse comments.
- (2) If the loan recipient is unable to resolve the adverse comments, the Department will render a decision concerning the adverse comments.
- (3) Should the loan recipient or the party which originally made the adverse comments desire to appeal the above decision, a request for an informal hearing must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Executive Director, and the affected parties. The Executive Director will render a decision on the appeal as a result of the informal hearing.
- (4) Should the loan recipient or the party which originally made the adverse comments desire to appeal the above informal hearing decision, a request for a formal hearing by the Commission must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission will hold a formal hearing to consider the matter and will render a decision.
- (5) Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

APPENDIX C

Procurement Requirements for WPCRLF Loan Recipients

In the procurement of all construction, equipment, materials, supplies, professional and nonprofessional services and all other costs related to the WPCRLF project, all loan recipients must comply with state purchasing laws as they relate to local governments.

The procurement and conduct of all professional engineering and land surveying services must also be in accordance with the Code of Conduct and other guidance and interpretations established by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

The procurement and conduct of all construction contracts must also be in accordance with the rules and regulations of the Mississippi State Board of Contractors and other guidance and interpretations established by the Mississippi State Board of Contractors.

All loan recipients must submit a procurement certification stating that the loan recipient has reviewed the proposed costs in sufficient detail to determine that these costs are reasonable and indicating that all of the above referenced requirements have been and will be met. If any of the above procurement requirements are violated, the Department may determine that the related costs are unallowable and may require repayment of all WPCRLF Loan funds paid for such costs, in accordance with Rule 6.3.H.(6) of these regulations.

APPENDIX D

Minority and Women's Business Enterprise Requirements (MBE/WBE)

These MBE/WBE requirements apply to all projects funded within a fiscal year in which federal capitalization grants to the Department require such compliance. The Department will establish "fair share" objectives for participation by minority and women's business enterprises in WPCRLF funded projects. The loan recipient must undertake the following steps in the procurement of materials, equipment, supplies, and construction:

- (1) Include qualified minority and women's businesses on solicitation lists,
- (2) Assure that minority and women's businesses are solicited whenever they are potential sources,
- (3) Divide total requirements, when economically feasible, into small tasks or quantities to permit maximum participation by minority and women's businesses,
- (4) Establish delivery schedules, when practical which will encourage participation by minority and women's businesses,
- (5) Use the services of the Office of Minority Business Enterprises of the Mississippi Department of Economic and Community Development and the Contract Procurement Centers of the U.S. Department of Commerce, as appropriate, and
- (6) Require the contractor to take the five (5) steps listed above, if the contractor awards subcontracts.

The loan recipient, engineer, and prime contractor(s) must also follow the guidance in the Department document "Utilization of Minority and Women's Business Enterprises."

Minority and women's business enterprises must be certified by the Mississippi Department of Economic & Community Development, Office of Minority Business Enterprises or the Mississippi Department of Transportation.

APPENDIX E

Debarment and Suspension

The Department is prohibited from entering into loan agreements with loan applicants that have been debarred or suspended by any state or federal agency.

Loan recipients are prohibited from entering into contractual agreements with individuals, businesses, organizations, or any other entities that have been debarred or suspended by any state or federal agency.

Loan recipients are responsible for ensuring that prime contractors utilized on the project are not debarred or suspended. Likewise, prime contractors are responsible for ensuring that subcontractors utilized on the project are not debarred or suspended.

Anyone may contact the Department concerning the existence of a cause for debarment or suspension. The Department may refer the matter to the State Attorney General or other appropriate office for further investigation. If, after review or investigation, the Department reasonably believes that a cause for debarment exists, the Department may propose debarment or suspension and may initiate procedures similar to, but not necessarily identical to, federal regulation 40 CFR Part 32: Debarment and Suspension Under EPA Assistance Programs.

Such above described debarment or suspension actions will not affect existing executed contractual agreements, unless such agreements have been terminated or suspended under the terms of the agreement by the loan recipient.

APPENDIX F

WPCRLF Loan Recipient/Department Disputes Procedures

Only WPCRLF loan recipients may submit a notice of dispute (disagreement) with a decision made by the Department, with the exception of decisions regarding Appendix B, State Environmental Review Process, of these regulations. The following procedures will be used to resolve disputes between the loan recipient and the Department:

- (1) Within any deadlines established by the Department, the loan recipient must submit a written notice of dispute with a Department decision, including a summary of the dispute and reasons the loan recipient believes the Department decision should be reversed.
- (2) The Department staff will then render a written decision on the dispute and will include reasons for the decision.
- (3) Should the loan recipient desire to appeal the Department staff decision, a request for an informal hearing must be received by the Department within 30 days after the date of the Department staff decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Executive Director, and the affected parties. The Executive Director will render a decision on the appeal as a result of the informal hearing.
- (4) Should the loan recipient desire to appeal the above informal hearing decision, a request for a formal hearing before the Commission must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission will hold a formal hearing to consider the matter and will render a decision.
- (5) Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

APPENDIX G

Waste, Fraud and Abuse

The loan recipient is responsible for preventing, detecting, and prosecuting waste, fraud, abuse, and all other corrupt practices which occur in relation to the WPCRLF loan project.

If the loan recipient becomes aware of any allegation, evidence, or the appearance of corrupt practices, the loan recipient must:

- (1) Immediately inform the Department in writing.
- (2) Promptly pursue available state and local legal, administrative, and contractual remedies.

The Department may disallow costs under the WPCRLF loan agreement when the costs are determined to be related to waste, fraud, abuse or other corrupt practices. The Department may also require repayment of WPCRLF loan funds paid for such costs in accordance with Rule 6.3.H.(6) of these regulations.

APPENDIX H

Loan Recipient Accounting and Auditing Requirements

All WPCRLF loan recipients must maintain project accounts in accordance with generally accepted government accounting standards, as defined by the Guidelines of the Municipal Accounting and Audit Manual, as prescribed by the State Auditor's Office. Charges to the project account must be properly supported, related to allowable construction costs, and documented by appropriate records. These project accounts must be maintained as separate accounts.

APPENDIX I

Procurement Protest Procedures

This Appendix sets forth the process for the resolution of procurement protests filed with the loan recipient by an adversely affected party. The Loan Recipient's protest procedures must include these requirements:

- (1) Prior to advertisement for bids, the loan recipient must establish its own procedures for prompt consideration of initial protests concerning solicitations or contract awards. A "protest" is a written complaint concerning the loan recipient's solicitation or award of a contract. The protest must be filed with the loan recipient by a party with a direct financial interest adversely affected by a loan recipient's procurement action and must be filed in accordance with and within the time frame established by the loan recipient's protest procedures.
- (2) Any party which transmits any document concerning the protest during the course of a protest and protest resolution must simultaneously furnish all other affected parties with a copy of all documents in the transmittal.
- (3) Upon receipt of a protest, the loan recipient must make a determination on the protest in accordance with the loan recipient's protest procedures within thirty (30) calendar days after such protest or sooner, if so required by the loan recipient's procurement protest procedures.
- (4) The party with a direct financial interest adversely affected by a loan recipient's determination of the protest may appeal such a determination only through the appropriate court of competent jurisdiction, provided such appeal is initiated within seven (7) calendar days after receipt of the determination.
- (5) Any delay due to a protest or protest resolution will not relieve the loan recipient of the requirement to meet the project schedule established in the loan agreement, nor will such delays prevent the Department from pursuing the remedies for default established in the loan agreement.

APPENDIX J

Applicable State and Federal Laws, Regulations, and Executive Orders

During the planning, design, construction, and operation of the project, the loan recipient shall comply with all applicable laws and regulations and shall acquire all applicable permits as described in the Departmental publication "Environmental Permit Directory," or its successor. The applicable related state laws and regulations are listed below. The WPCRLF regulations are not complete without these laws and regulations:

State Laws and Regulations

- A. Guidelines for Review of Siting Criteria in Applications for Air and Water Pollution Control Permits.
- B. Mississippi Water Quality Criteria for Intrastate, Interstate and Coastal Waters.
- C. Mississippi Nonhazardous Waste Management Regulations.
- D. Mississippi Coastal Wetlands Protection Law, Section 49-27-1 through 49-27-69 of the Mississippi Code Annotated (Supp. 1989), et seq.
- E. Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants.
- F. Wastewater Permit Regulations for National Pollutant Discharge Elimination System (NPDES), Underground and Injection Control (UIC) and State Operating Permits.
- G. The Nongame and Endangered Species Conservation Act, Sections 49-5-101 through 45-5-119 of the Mississippi Code.
- H. The State Antiquities Law, Section 39-7-3, et seq. of the Mississippi Code of 1972.
- I. State of Mississippi Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators.
- J. Mississippi Municipal and Domestic Water and Wastewater System Operators Certification Act of 1986, Sections 21-27-201 through 21-27-221 Mississippi Code of 1972 Annotated.
- K. Mississippi State Purchasing Laws, Title 31, Mississippi Code 1972, annotated.
- L. Mississippi State Engineering and Surveying Law, Sections 73-13-1 through 73-13-99 Mississippi Code 1972, annotated, and rules and regulation of procedure

promulgated thereunder by Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

- M. Mississippi Real Property Acquisition Policies Law Section 43-37-1 through 13.

Federal Laws and Executive Orders

- A. Age Discrimination Act of 1975, Pub. L. 94-135.
- B. Civil Rights Act of 1964, Pub. L. 88-352.
- C. Section 13 of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500 (the Clean Water Act).
- D. Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (including Executive Orders 11914 and 11250).

APPENDIX K

Loan Agreement Defaults and Remedies

Each of the following events is a default of a loan agreement:

- (1) Failure of the Loan Recipient to make any loan repayment when it is due and such failure shall continue for a period of thirty (30) days.
- (2) Failure to comply with the provisions of the Agreement or in the performance or observance of any of the covenants or actions required by the Agreement.
- (3) Any warranty, representation or other statement by, or on behalf of, the Loan Recipient contained in the Agreement or in any information furnished in compliance with, or in reference to, the Agreement, which is false or misleading in any material respect.
- (4) An order or decree entered, with the acquiescence of the Loan Recipient, appointing a receiver of any part of the Project or Revenues thereof; or if such order or decree, having been entered without the consent or acquiescence of the Loan Recipient, shall not be vacated or discharged or stayed on appeal within sixty (60) days after the entry thereof.
- (5) Any proceeding instituted, with the acquiescence of the Loan Recipient, for the purpose of effecting a compromise between the Loan Recipient and its creditors or for the purpose of adjusting the claims of such creditors, pursuant to any federal or state statute now or hereafter enacted, if the claims of such creditors are payable from Revenues of the Project.
- (6) Any bankruptcy, insolvency or other similar proceeding instituted by, or against, the Loan Recipient under federal or state bankruptcy or insolvency laws now or hereafter in effect and, if instituted against the Loan Recipient, is not dismissed within sixty (60) days after filing.
- (7) Failure to give timely notice of default as required below when such failure shall continue for a period of thirty (30) days.

The Loan Recipient shall give the Department immediate written notice of an event of default. Upon any event of default and subject to the rights of bondholders with prior liens, the Department may enforce its rights by utilizing one or more of the following remedies:

- (1) By mandamus or other proceeding at law or in equity, cause to establish and collect fees and charges for use of the Project and to require the Loan Recipient to fulfill the Agreement.
- (2) By action or suit in equity, require the Loan Recipient to account for all moneys received from the Department or from the ownership of the Project and to account for the receipt, use, application or disposition of the Revenues.

- (3) By action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the Department.
- (4) By applying to a court of competent jurisdiction, cause to appoint a receiver to manage the Project, establish and collect fees and charges, and apply the Revenues to the reduction of the obligations under this Agreement.
- (5) By certifying to the Tax Commissioner delinquency on loan repayments, the Department may intercept the delinquent amount, plus ten (10) percent annual penalty interest on the amount due to the Department, from any unobligated funds due to the Loan Recipient under any revenue or tax sharing fund established by the State. Penalty interest shall accrue on any amount due and payable beginning on the thirtieth (30th) day following the date upon which payment is due. The penalty interest shall be compounded monthly.
- (6) By notifying financial market credit rating agencies.
- (7) By administratively charging or suing for payment of amounts due, or becoming due, plus ten (10) percent annual penalty interest which shall accrue on any amount due and payable beginning on the thirtieth (30th) day after such notification by the Department, together with all costs of collection, including attorneys' fees. The penalty interest shall be compounded monthly.
- (8) By accelerating the repayment schedule or increasing the interest rate.
- (9) By withholding payments to the Loan Recipient.
- (10) By terminating the Agreement, after providing thirty (30) days written notice of such intent to terminate the Agreement. Such termination will not affect the duty of the Loan Recipient to repay loan funds paid thus far.

No delay or omission to exercise any right or power accruing upon event of default shall impair any such right or power or shall be construed to be a waiver of any such default or acquiescence therein, and every such right and power may be exercised as often as may be deemed expedient. No waiver of any default under this Agreement shall extend to or affect any subsequent event of default, whether of the same or different provision of this Agreement, or shall impair consequent rights or remedies.

APPENDIX L

Loan Recipient/Contractor Claims and Disputes.

The Department is not a party to any contract between the WPCRLF loan recipient and construction contractor(s), engineer(s), attorney(s), equipment supplier(s), subcontractor(s) or any other parties.

Upon execution of any contract between the loan recipient and any other party in regard to a WPCRLF funded project, the Department does not assume any authorities, duties, responsibilities, or liabilities under such a contract.

The Department does not have any authority, duty, responsibility, or liability in contract claims or dispute identification, negotiation, resolution, or any other actions regarding contract claims or disputes under the contract(s) between the loan recipient and any other party.

No actions taken by the Department, either directly or indirectly, in regard to the WPCRLF loan funded project constitute or establish any determinations, authority, duty, responsibility, or liability under the contract(s) between the loan recipient and any other party.

The loan recipient and the contracting party must resolve all claims and disputes by negotiation, arbitration, litigation, or other means as provided in the contract documents and state law, prior to submission of any related change order or contract amendment to the Department for review and approval, in order to obtain a WPCRLF loan allowability determination.

APPENDIX M

Definitions

The following words and terms, when used in this regulation, will have the following meanings, unless the context clearly indicates otherwise:

- (1) Act – The Federal Water Pollution Control Act, as amended, 33 USC 1251, et seq., including any amendments.
- (2) Administration Fees – Those fees charged to the loan recipient by the Commission to defray the reasonable costs of administering the revolving fund.
- (3) Allowable Costs – Those project costs that are eligible, reasonable, necessary, allocable to the project, within the established project scope and budget, in conformance with the WPCRLF regulations, and determined allowable by the Department.
- (4) Authorized Representative – The signatory agent of the applicant authorized and directed by the applicant's governing body to make application for assistance and to sign documents on behalf of the applicant, as required to undertake and complete the project. The signatory agent must be a member or an employee of the applicant's governing body and may not be under a separate contract with the applicant at any time during the execution of the project.
- (5) Binding Commitment – A WPCRLF loan offer, as described in these regulations.
- (6) Budget Period – The time period beginning on the date established in the loan agreement and ending on the date 30 days after the Department's final construction observation, during which allowable costs may be incurred.
- (7) Change Order – The documents, including supporting documentation, executed by the loan recipient and the construction contractor, upon recommendation of the engineer if required by the contract documents, authorizing a change, alteration, or variance in the plans, specifications, and contract documents, including, but not limited to, additions or deletions of work to be performed pursuant to the contract or a change in costs or time for work performed after execution of the contract.
- (8) Collector Sewer – The common lateral sewers, within a publicly owned treatment system, which are primarily installed to receive wastewater directly from facilities which convey wastewater from individual systems or from private property.
- (9) Commission – The Mississippi Commission on Environmental Quality or its successors.
- (10) Consolidation Project – The acquisition of an existing entity or its treatment works by another or the merger of two entities.

- (11) Construction – Any one or more of the following: erection, building, acquisition, alteration, repair, improvement or extension of treatment works.
- (12) Department – The Mississippi Department of Environmental Quality, and its designated representatives or successors.
- (13) Eligible Applicant – Any county, municipality, municipal public utility, authority, district, political subdivision or other governmental unit created under state law which has authority to dispose of domestic wastewater, industrial wastewater, wastewater sludges resulting from the treatment of such wastewater, stormwater, or nonpoint sources of pollution, has the authority under State law to receive WPCRLF loan assistance, has the ability to comply with these regulations and the requirements of the WPCRLF loan agreement, and which is not in arrears in repayments to the Water Pollution Control Revolving Fund, the Water Pollution Control Emergency Loan Fund, the Water Pollution Abatement Loan Fund or any other loan.
- (14) Eligible Costs – Costs in which WPCRLF loan participation is authorized pursuant to applicable statute.
- (15) Engineer – Unless otherwise indicated, the engineer, or engineering firm, registered by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors, retained or employed by the loan recipient to provide professional engineering services during the planning, design and/or construction of the project.
- (16) Executive Director – The executive director of the Mississippi Department of Environmental Quality or his designee.
- (17) Financial Capability Summary – A financial analysis of a water pollution control system to determine whether the system has the capability to reliably meet the financial obligations on a long term basis.
- (18) Force Account – Involves the use of the loan recipient's employees, equipment for construction, construction related activities and/or architectural and engineering services.
- (19) Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- (20) Inflow – Water other than wastewater that enters a sewer system (including sewer service connections) as a result of rainfall or rainfall induced soil moisture from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

- (21) Interceptor Sewer – A sewer which is designed for one or more of the following purposes:
- (a) To intercept wastewater from a final point in an existing or proposed collector sewer and convey such wastes directly to a treatment facility or another interceptor or pump station.
 - (b) To replace an existing wastewater treatment facility and transport the wastes to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant.
 - (c) To transport wastewater, together with quantities of infiltration and inflow that are not admitted intentionally, from one or more municipal collector sewers to another municipality or to a regional facility for treatment.
 - (d) To intercept an existing discharge of raw or inadequately treated wastewater for transport directly to another interceptor, pump station or to a treatment plant.
- (22) Interlocal Agreement – An agreement or contract between the loan applicant/recipient and other entities relating to use, enforcement or finances of the project or treatment works, which may be necessary to ensure completion and operation, and maintenance of a useful project.
- (23) Loan Agreement – A legal and binding agreement between the Department and the loan recipient through which the Department provides WPCRLF assistance for eligible and allowable costs and the recipient agrees to repay any administrative fees to the Department and the principal sum and interest to the WPCRLF over a period and at an interest rate established in the loan agreement.
- (24) Loan Applicant – An eligible applicant that applies or intends to apply for financial assistance from the WPCRLF program
- (25) Loan Recipient – An eligible applicant that executes a WPCRLF loan agreement.
- (26) Overflows and Bypasses – Polluted water, such as sewage, which overflows or bypasses any portion of the treatment works prior to complete and final treatment and discharge in accordance with the permit.
- (27) Project – The scope of work for which financial assistance is provided under the WPCRLF loan agreement.
- (28) Project Completion – The date of the final construction observation as performed by the Department for the purpose of a loan allowability determination.
- (29) Repayment – Administrative fees, principal and interest repayments on WPCRLF loans as established in the loan agreement.

- (30) Service Line – A conduit intended to carry wastewater, together with quantities of infiltration and inflow that are not admitted intentionally, from residences, public buildings and businesses to a collector sewer.
- (31) Title Counsel or Legal Counsel – The attorney(s) of record, legally practicing, who provide(s) legal advice and certifications relating to the project for the loan applicant/recipient.
- (32) Treatment Works – Any devices and systems which are used in the storage, treatment, transportation, recycling, and reclamation of domestic, industrial, and/or commercial wastewater, including intercepting sewers, outfall sewers, sewage collection systems, service lines, pumping, power, and other equipment and their appurtenances; extensions, improvements, repair, additions, and alterations thereof; and any works, including the land that will be an integral part of, or used in connection with, the treatment process (including land used for the storage of treated water in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from such treatment; and any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of domestic, industrial, and/or commercial wastewater, stormwater runoff, wastewater in combined stormwater and sanitary sewer systems, and nonpoint source pollution.
- (33) User Charge Ordinance – A legally enforceable ordinance, regulation or corporate resolution enacted by the loan recipient which includes, at least by reference, the user charge system, and establishes user charge rates, to generate adequate revenues to cover all costs of the treatment works, as required by the user charge system.
- (34) User Charge System – The system by which the loan recipient charges users of the treatment works rates that produce adequate revenues required for operation, maintenance, replacement of equipment, retirement of existing debt, and repayment of the WPCRLF loan for the project.
- (35) Value Engineering – A specialized cost control technique which uses a systematic and creative approach to identify and focus on high costs in a project in order to arrive at a cost saving without sacrificing the purpose, reliability or efficiency of the project.
- (36) WPALP – The Water Pollution Abatement Loan Program
- (37) WPCELF – The Water Pollution Control Emergency Loan Fund.
- (38) WPCRLF – The Water Pollution Control Revolving Loan Fund.

Part 6, Chapter 7: Mississippi Commission on Environmental Quality Water Pollution Control Revolving Loan Fund Program Regulations (Effective For Projects Funded On and After December 19, 2004)

TABLE OF CONTENTS

Rule 7.1 Introductory Provisions

Rule 7.2 Program Requirements

Rule 7.3 Project Requirements

APPENDICES

- A. Determination of Eligible and Allowable Costs
 - B. State Environmental Review Process
 - C. Procurement Requirements for WPCRLF Loan Recipients
 - D. Minority and Women's Business Enterprise (MBE/WBE) Requirements
 - E. Debarment and Suspension
 - F. WPCRLF Loan Recipient/Department Disputes Procedures
 - G. Waste, Fraud and Abuse
 - H. Loan Recipient Accounting and Auditing Requirements
 - I. Procurement Protest Procedures
 - J. Applicable State and Federal Laws, Regulations and Executive Orders
 - K. Loan Agreement Defaults and Remedies
 - L. Loan Recipient/Contractor Claims and Disputes
 - M. Definitions
-

Rule 7.1 Introductory Provisions.

- A. Scope of Regulations. These regulations, adopted pursuant to Sections 49-17-81 through 89, Mississippi Code of 1972, as amended, shall govern the Mississippi Water Pollution Control Revolving Loan Fund (WPCRLF) Program. These WPCRLF regulations may be superseded by the WPCRLF loan agreement when such a variance is determined prudent by the Executive Director and when not in conflict with any state or federal law, regulation, or executive order.
- B. Federal Equivalence and Cross-Cutter Requirements. Federal regulation 40 CFR 35.3135(f) requires that "equivalency" projects funded under the State Water Pollution Control Revolving Fund must comply with sixteen specific requirements of Title II (the EPA Construction Grants Program) of the Federal Water Pollution Control Act. "Equivalency" projects are generally defined as wastewater projects constructed with funds which equal the amount of the federal grants to the State for this program.

Similarly, 40 CFR 35.3145 requires that the State must also require all recipients of funds which equal the amount of the federal grants to the State to comply with certain other “cross-cutting” federal authorities. Cross-cutting authorities are federal laws and authorities that apply to these projects independent of the federal Water Pollution Act and subsequent amendments.

Since the beginning of this program in FY-89 and continuing through FY-00, the Department required that all projects receiving loan funding meet federal equivalency and cross-cutter requirements and has banked the amount of these loan awards in excess of the federal capitalization grants toward meeting equivalency and cross-cutter requirements of future federal capitalization grants. Accordingly, the Department has determined that beginning in FY-01, projects funded in this program will not be required to meet all federal equivalency and cross-cutter requirements, and this practice will continue until the banked equivalency requirements are exhausted.

Thus, almost all of these federal equivalency and cross-cutter requirements are excluded from these regulations. However, certain of these requirements have been retained in order to secure a reasonable assurance that the Department funds projects that are environmentally sound, that the loan recipient can construct, operate, and maintain the project and repay the loan, that these public funds are adequately protected and expended only for their intended purpose, and as otherwise required by federal law and regulations. Also, certain federal requirements are mandatory for all projects and are listed in Appendix J.

Source: *Miss. Code §§ 49-17-81 through 49-17-89, 49-2-1, et seq. and 49-17-1, et seq.*

Rule 7.2 Program Requirements.

- A. Eligible Applicant Determination. To be eligible for financial assistance, an applicant must meet the definition of an eligible applicant as described in Appendix M of these regulations, as determined by the Department.
- B. Intended Use Plan (IUP). In each fiscal year for which funds are available in the WPCRLF, the Commission will establish and publish an IUP in conformance with federal requirements. The IUP includes a mechanism developed by the Department to prioritize potential projects for uses of the available funds. The IUP describes the intended use of the funds in the WPCRLF and how the uses support the goals of the program.
- C. Reserves. The Commission may reserve certain percentages of the State’s federal Title VI allotment from each fiscal year for administration of the WPCRLF program and for planning under Sections 205(j) and 303(e) of the Act, consistent with the Act and state law. The Commission may also charge administrative fees to loan recipients for administration of the WPCRLF program, as established in each year’s IUP.

- D. Public Comment and Review. In accordance with the Act, the Commission will establish and provide for public comment on and review of the annual IUP. The Department may take into consideration any comments prior to adoption of the annual IUP. After adoption by the Commission, modification to these documents may be adopted by the Commission as provided for in the IUP without further public comment and review.
- E. WPCRLF Uses. The fund may be used for the following purposes, or as established in the IUP, for a given fiscal year.
- (1) To make loans to eligible applicants on the condition that:
 - (a) Such loans are made at or below market interest rates, at terms not to exceed 20 years after project completion, or for such period as may be allowed by federal law.
 - (b) The loan applicant shall establish a dedicated source of revenue for repayment of loans.
 - (c) The fund shall be credited with all payments of principal and interest on all loans.
 - (d) The loan applicant is in compliance with WPCRLF regulations.
 - (2) Under the conditions in (1) above, to refinance the debt obligation of loan recipients when such debt obligations were incurred and construction began on or after such date as established in the IUP for a given fiscal year. The loan applicant agrees that, by pursuing such a refinancing arrangement, it does so at its own risk and thereby relieves the Commission and Department of all responsibility and liability should costs later be determined unallowable for any reason or should funding not become available for any reason.
 - (3) As a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the state if the proceeds of the sale of such bonds will be deposited in the WPCRLF and provided such authority is established in state law.
 - (4) For the reasonable costs of administering the WPCRLF program and conducting activities under Title VI of the Act.
 - (5) To earn interest on WPCRLF accounts.
- F. WPCRLF Financial Assistance.
- (1) The WPCRLF has been established to provide loans to eligible loan applicants for the purpose of funding:

- (a) Construction of publicly owned treatment works as defined in Section 212 of the Act.
 - (b) Implementation of nonpoint source pollution management programs established under Section 319 of the Act.
 - (c) Development and implementation of estuary conservation and management plans under Section 320 of the Act.
- (2) Basic financial assistance requirements are as follows:
 - (a) Section 212 projects shall be included on the fundable or planning portion of the Priority List in the current year's IUP.
 - (b) Terms of any financial assistance shall be as established in the IUP for the projects to be funded in each fiscal year and shall be further established in the loan agreement.
 - (c) The loan applicant or recipient shall comply with the requirements of the Act, as amended, all applicable state laws, requirements, regulations, and the annual IUP.
 - (d) The applicant must not be in violation of any provisions of a previously awarded WPCRLF, WPCELF or WPALP loan agreement.
 - (e) The applicant must not be in arrears in repayments to the WPCRLF, the WPCELF, the WPALP or on any other loan.
 - (f) Funds will not be disbursed to loan recipients until the loan recipient has entered into a WPCRLF loan agreement with the Department.
 - (g) The WPCRLF program will provide assistance only to projects that are consistent with any water quality management plans developed under sections 205(j), 208, 303(e), 319 and 320 of the Act as applicable.
- G. State Capitalization Grant Application. After the Commission adopts each annual IUP, the Executive Director may submit the IUP with an application to the appropriate federal agency for any available federal funds.
- H. WPCRLF Program Administration. The WPCRLF Program will be administered by the Commission acting through the Department, in accordance with the Act, applicable federal regulations, state law and these regulations.
- I. Responsibility. The applicant/loan recipient is responsible for compliance with all applicable state and federal laws and regulations, and for the proper planning, design, construction, operation, maintenance, replacement, performance, and fiscal integrity of

the project. The Department's approval of any document does not relieve the applicant/loan recipient or any others of any liabilities or responsibilities. Department review and/or approval of any document is for loan eligibility/allowability purposes and does not establish or convey any such liability or responsibility.

- J. Other Approvals. The applicant/loan recipient must obtain approval of all necessary documents from each state, local, and federal agency having jurisdiction over or funding in the project, if so required by that agency.

Source: *Miss. Code §§ 49-17-81 through 49-17-89, 49-2-1, et seq. and 49-17-1, et seq.*

Rule 7.3 Project Requirements. All water pollution control projects funded by the WPCRLF must comply with the following requirements. Non-point source pollution control projects and estuary management projects must comply with these requirements to the extent described in the loan application and loan agreement, as established by the Department.

A. Facilities Planning.

- (1) Preplanning Guidance and Conference. The Department will provide facilities planning guidance to the potential applicant and/or its engineer. The potential loan applicant and/or its engineer should attend a preplanning conference with the Department as early in the planning process as practical. During the conference the staff will provide information on the required facilities planning documents necessary to comply with these regulations. All facilities plans must be prepared by or under the responsible supervision of a professional engineer registered under Mississippi law.
- (2) Contents of the Facilities Plan. The facilities plan must comply with the Department's guidance, including updates, Appendices A, B and J of these regulations and any other requirements of the Department pursuant to review of the facilities plan. The facilities plan must generally contain the following, as determined appropriate by the Department:
 - (a) A description of the existing water pollution control facilities, if any, owned by the applicant.
 - (b) A description of the existing and/or future water pollution problem or threat to be addressed by the proposed project.
 - (c) Documentation of sufficient flow monitoring and/or estimation to quantify wastewater, infiltration and inflow, applicable effluent limitations, and any other technical data necessary to provide the basis for preliminary engineering design of the project.

- (d) A description of the proposed facilities, costs, location, and how the proposed facilities will address the existing and/or future water pollution problem or threat identified in the plan.
- (e) A demonstration that minorities within the jurisdictional boundaries of the loan applicant will not be systematically excluded from the benefits of the proposed projects.
- (f) A specific indication that each applicable intergovernmental review agency has been contacted regarding the proposed project, any adverse comments from the applicable intergovernmental review agencies, and an indication of all necessary permit applications and environmental survey clearances that will be required for the project. Intergovernmental review agencies are as follows:
 - (1) Mississippi Department of Archives and History (for archaeological/cultural resources review under the State Antiquities Law)
 - (2) Mississippi Department of Wildlife, Fisheries, and Parks-Natural Heritage Program (for vegetative/wildlife review under the Nongame and Endangered Species Conservation Act)
 - (3) U.S. Army Corps of Engineers, Regulatory Functions Branch (for Section 404 {wetlands}, Section 10 {navigable waterways}, and floodplain impact review)
 - (4) Mississippi Department of Marine Resources (Jackson, Harrison, and Hancock County Projects only; for Mississippi Coastal Program and applicable Mississippi law review)
 - (5) U.S. Forest Service (projects located in a federally designated Wild and Scenic River Basin only, for federal Wild and Scenic Rivers Act compliance)
- (g) For projects defined under Section 212 of the Act, a comparative evaluation of the no-action alternative and the proposed alternative, which accounts for beneficial and adverse consequences that each alternative would have on existing and future environmental resources, as required by Appendix B.
- (h) A financial capability summary using planning level cost estimates.
- (i) For projects defined under Section 212 of the Act, (1) proof of publication of the notice to the public of the proposed project and for the opportunity

to comment on alternatives and to examine environmental review documents, including the facilities plan and any comments, permits, or clearances from the intergovernmental review agencies, (2) a copy of any comments received from the public, and (3) a description of how all comments were addressed.

- (j) For projects defined under Section 212 of the Act and determined by the Department to be controversial, (1) proof of publication of the public hearing notice published in a local newspaper of general circulation providing at least a 30 day advance notice of a public hearing to be held by the loan applicant, (2) a copy of the transcript of the public hearing and (3) a description of how all comments were addressed.
 - (k) Calculations showing the necessary user charges for the project using planning level cost estimates.
- (3) State Environmental Review Process. For projects defined under Section 212 of the Act, prior to approval of the facilities plan, the Department will complete the appropriate portions of the state environmental review process described in Appendix B of these regulations, based upon information provided in the facilities plan.
 - (4) Approval of Facilities Plan. The Department will approve the facilities plan after completing any applicable state environmental review process and after determining that all facilities planning requirements appear to be met.

B. Application for WPCRLF Loan.

- (1) Preapplication Guidance and Conference. The Department will provide a loan application package to the potential loan applicant and/or its engineer. The potential loan applicant and/or its engineer may request a pre-application conference with the Department as early in the application process as practical.
- (2) Contents of an Application Package. Forms provided by the Department must be used and may not be altered. The WPCRLF loan application may include assistance only for costs that are allowable in accordance with Appendix A of these regulations and may include a contingency, as determined by the Department, in the project budget. The application package must conform to these regulations, and must include the following:
 - (a) A WPCRLF loan application form with original signature. Sources of all funds other than WPCRLF must be identified. Prior to loan award, the Department must receive an assurance from all other funding sources that other funds necessary to construct an operable project are or will be available on a schedule compatible with that required in the loan agreement.

- (b) A proposed user charge system and ordinance.
- (c) All proposed or executed contracts for construction phase engineering services.
- (d) All other proposed or executed contracts (administration, legal, facilities planning, design, and any other services), if WPCRLF participation is requested.
- (e) An allowable cost certification for each executed contract submitted for WPCRLF participation, wherein the loan applicant and professional certify that all costs associated with professional services are WPCRLF eligible and reasonable.
- (f) A procurement certification, wherein the loan applicant and counsel certify that the loan applicant will adhere to state purchasing laws, as they apply to local governments.
- (g) A revised financial capability summary using the most recent cost estimates, if significantly greater than that shown in the facilities plan.
- (h) Copies of issued permits or clearance letters from all required intergovernmental review agencies.
- (i) A legal certification, wherein the loan applicant and legal counsel certify that the loan applicant is an eligible applicant in accordance with Appendix M of these regulations.
- (j) A resolution by the loan applicant's governing body which 1) authorizes the submission of the application and 2) designates an authorized office or representative to make application for assistance, to execute the loan agreement and any amendments and to sign documents, on behalf of the applicant, required to undertake and complete the project.
- (k) A copy of all existing or proposed interlocal agreements related to the project, if applicable. Such agreements must be executed by all appropriate parties and must be approved by the Department prior to loan offer.
- (l) An executed Pre-Award Compliance Review Report (EPA Form 4700-4),
- (m) All waste disposal permit applications.
- (n) All other permits, forms, documents, and supporting information that may be required by the Department.

C. Offer of a WPCRLF Loan.

- (1) Upon determination by the Department that (a) all applicable requirements of the WPCRLF loan application have been met, (b) the facilities plan has been approved, (c) the project is on the current year priority list and (d) funds are available for the amount of the WPCRLF loan application, the Executive Director will execute and transmit a WPCRLF loan offer to the loan recipient. The loan agreement will include a project schedule consistent with time frames established in these regulations; however, the Department may vary these time frames and/or establish additional ones.
- (2) Upon receipt of the WPCRLF loan offer, the loan recipient must execute and return it within the time frame established in the WPCRLF loan offer. The loan offer becomes void if not executed and returned within the time frame specified, unless extended by the Executive Director.

D. Design.

- (1) Predesign Guidance and Conference. The Department will provide design guidance to the loan applicant/recipient and/or its engineer, who may request a predesign conference with the Department.
- (2) Plans, Specifications, Contract Documents, and Related Submittals.
 - (a) General Requirements. By the dates specified in the loan agreement, the loan recipient must submit to the Department complete plans, specifications, contract documents, and the applicable related submittals listed below for each contract. The engineer must prepare plans, specifications, and contract documents on all appropriate elements of the project. These documents must conform to Department requirements, to Appendices A, B, C, D, E, I, J and L of these regulations, and to the requirements of Departmental design guidance.
 - (b) Contents In addition to the above, the plans, specifications, and contract documents must minimally contain the following:
 - (1) Provisions assuring compliance with these regulations and all relevant federal and state laws.
 - (2) Forms by which the bid bond, performance bond and payment bonds will be provided.
 - (3) Provisions for the recipient to retain a certain percentage of the progress payments otherwise due to the contractor, in accordance with state law.

- (4) Provisions requiring the contractor to obtain and maintain the appropriate insurance coverage.
- (5) Provisions giving authorized representatives of the loan recipient access to all construction activities, books, records, and documents of the contractor for the purpose of observation, audit and copying during normal business and/or working hours.
- (6) Provisions for compliance with any applicable Minority Business Enterprise/Women Business Enterprise (MBE/WBE) requirements as described in Appendix D of these regulations.
- (7) Provisions for change orders.
- (8) Provisions for liquidated damages.
- (9) Those conditions, specifications, and other provisions set forth or required by the Department.

(c) Related Submittals

- (1) A copy of the issued NPDES permit or the state operating permit, if required.
- (2) A copy of the issued solid waste disposal permit, if required.
- (3) A copy of the Permit Board's variance, when it is not possible to provide buffer zones, if project includes wastewater or sludge treatment processes.
- (4) For all loan ineligible real property necessary for the project, limited site certificates from both the loan recipient and the title counsel ich indicate that all such real property has been secured by at least one of the following actions:
 - (i) Clear title or an easement or lease for the expected life of the project.
 - (ii) Execution by both parties of a bona fide option to purchase or lease for the expected life of the project.
 - (iii) Initiation of condemnation by filing such action in court.
- (5) For all loan eligible real property necessary for the project, limited site certificates from both the loan recipient and the title counsel

which indicate that all such real property has been secured by at least one of the following actions:

- (i) Execution by both parties of a bona fide option to purchase the property or an easement
- (ii) Initiation of condemnation by filing such action in court

Prior to execution of the option to purchase and/or filing condemnation, the loan recipient must submit an appraisal and secure Department approval of the purchase price.

- (3) Approval of Plans, Specifications and Contract Documents.
By the dates established in the loan agreement, the loan recipient must secure approval of the plans, specifications and contract documents for each contract by the Department. The Department will approve the plans, specifications, and contract documents upon determining that these documents appear to:

- (a) Conform to the requirements of these regulations,
- (b) Be approvable pursuant to a technical review, and
- (c) Be consistent with the approved facilities planning documents and environmental determinations required by these regulations.

E. Construction Contracting and Loan Amendment.

- (1) For each construction contract, within the time frame established in the loan agreement and prior to advertisement for construction bids, the loan recipient must a) secure necessary local funds and submit proof of such funds, b) submit any other required permits or clearances, and c) submit clear site certificates from both the loan recipient and the title counsel which indicate that all required real property has been secured.
- (2) Within the time frames established in the loan agreement, the loan recipient must advertise each construction contract for bids.
- (3) Within 45 days after advertisement for construction bids on each contract, the loan recipient must receive bids on that construction contract.
- (4) Within 14 days after receipt of construction bids on each contract, the loan recipient must submit the MBE/WBE and related documentation for that contract as required by Appendix D of these regulations.
- (5) Within 21 days after receipt of construction bids on each contract, the loan recipient must submit the bid package for that contract.

- (6) Within 21 days after receipt of construction bids on the last contract, the loan recipient must submit all necessary executed professional services contracts and amendments and a loan agreement amendment request (consistent with as-bid construction costs, actual professional services contract amounts, and a contingency as determined by the Department).
- (7) After approval of the completed MBE/WBE documentation and bid package for each construction contract other than the last, the loan recipient may execute that contract.
- (8) Upon receipt of the MBE/WBE documentation and bid package for the last construction contract, all necessary executed professional services contracts and amendments, and any loan agreement amendment request, the Department will review these documents, determine whether any request for an increased loan amount is justified and allowable, and determine whether funds are available. After approval of the MBE/WBE documentation and bid package for the last construction contract, the loan recipient may execute that contract.
- (9) Within 60 days after receipt of bids for each construction contract, the loan recipient must execute the contract documents, must submit a copy of the executed contract documents, and must issue and submit a copy of the notice to proceed for that contract. The plans, specifications, and executed contract documents must not vary from those approved as loan eligible by the Department. The loan recipient may arrange and hold a preconstruction conference and must allow attendance and participation by the Department if such a conference is held.
- (10) After approval of any loan agreement amendment request, the Department will prepare and transmit an amended WPCRLF loan offer to the loan recipient. Upon receipt of an amended WPCRLF loan offer, the loan recipient must execute and return it to the Department within the timeframe established in the offer letter. Any increased project costs in excess of those approved based upon as-bid construction amounts and a contingency (as established by the Department) must be paid from sources other than WPCRLF loan funds.

F. Construction.

- (1) Enacted User Charge System and Ordinance.

By the date established by the Department in the loan agreement (based upon 90% of construction contract time) the loan recipient must enact the approved user charge system and ordinance and submit proof of enactment.

- (2) Observation During Construction.

The loan recipient must provide for adequate observation of all parts of the project by the engineer or his staff and must require the engineer's assurance that the work is being performed in a satisfactory manner in accordance with the WPCRLF loan agreement and the approved plans, specifications, contract documents and approved change orders.

The Department is authorized to observe the construction of any project at any time for compliance with the terms of the loan agreement and to determine if the loan recipient and engineer appear to be assuring that plans, specifications and contract documents are being followed. Such observation will not subject the Department to any legal action for claims, damages or any other liability. Such observation will not release the contractor from any obligation to perform the work in accordance with the requirements of the contract documents, or the engineer from determining compliance with the requirements of the contract documents, or the loan recipient from insuring compliance with the contract and the terms of the loan agreement.

The contractor, engineer, and the loan recipient must furnish the Department with every reasonable opportunity and means for determining whether the loan recipient and engineer are assuring that the work is in accordance with the requirements of the approved plans, specifications and contract documents. The Department is authorized to observe and require submission by the loan recipient of daily logs, record drawings, file notes, and any other documents prepared in relation to the WPCRLF funded project.

(3) Construction Deficiencies.

- (a) In the event that it appears to the Department that the loan recipient and engineer are not assuring that the construction work, materials, equipment or supplies are in conformity with approved plans and specifications, and contract documents, the Department may determine these items are unallowable for WPCRLF loan participation, unless the loan recipient takes action, through the engineer if applicable, in the manner provided for in the construction contract to correct any such deficiencies.
- (b) The Department may withhold WPCRLF loan payments for such time that it appears that the loan recipient and engineer are not assuring that construction work, materials, equipment or supplies are in accordance with the approved plans, specifications and contract documents, and may require the loan recipient to repay any previously paid amounts related to such items within 30 days of such notification.

(4) Change Orders.

- (a) General

The loan recipient may, at its discretion, execute change orders pertaining to the construction that are necessary under the circumstances, as provided in the contract documents and when in accordance with state law. Contract price, time, quantity, and specifications may only be changed by change order. Change orders must not change, vary, or alter the basic purpose or effect of the project. Change orders must be technically adequate and conform to Department design guidance and regulations. Eligible/ineligible costs must be appropriately separated.

(b) Change Order Submittals

After completion of the change order negotiation process and/or claims resolution between the loan recipient and the contracting party, an executed change order must be submitted to the Department for review and approval, in order to obtain a WPCRLF loan eligibility/allowability determination.

If any change order is submitted to the Department that is not complete and executed by the loan recipient, the contracting party, and the engineer if appropriate, the Department may return such change order without review. However, unilateral change orders executed by the loan recipient, and the engineer if appropriate, and identified as such, that are issued in accordance with the contract documents may be submitted to the Department for review and approval, in order to obtain a WPCRLF loan eligibility/allowability determination.

The loan recipient may submit a complete change order which has been executed conditional upon a WPCRLF loan eligibility/allowability determination by the Department.

If possible, approval of a change order should be secured from the Department before the work is started, particularly for change orders including time extensions. Approval may also be secured after the work is started; however, the loan recipient must bear the cost if the work is later determined to be ineligible or unallowable.

When the eligible cost of a project will be significantly reduced by a change order(s), the Department may issue an amendment to the loan agreement decreasing the loan amount, and the loan recipient must execute the amendment within the time frame established by the Department.

(c) Time Extensions

Justification for all contract time extensions need not be submitted to the Department unless the total time extensions for the contract exceed 25% of the original contract time.

(5) Contractor Bankruptcy or Default.

In the event of a contractor bankruptcy or default, any proposed agreements with the bonding company (other than the bonding company serving as general contractor or hiring another contractor acting as their agent) must be submitted for a WPCRLF loan allowability determination by the Department prior to execution. If the loan recipient determines that re-award of the construction contract or a portion thereof is necessary due to contractor bankruptcy or default, such proposed re-award contracts must be submitted for a WPCRLF loan allowability determination by the Department prior to execution. The loan recipient will be responsible for assuring that every appropriate procedure and incidental legal requirement are observed in advertising for bids or otherwise re-awarding a construction contract, if this course of action is taken.

(6) Project Completion.

- (a) Within 10 days after construction completion of each construction contract, the loan recipient must notify the Department of construction completion.
- (b) Within 30 days after the current construction contract completion date for each contract, all change orders which include time extensions and/or the request and justification for delay required in (c) below must be submitted to the Department for an allowability determination.
- (c) The Department will perform a final construction observation within 30 days after the current construction contract completion date of the last contract, unless further delayed by the Department pursuant to review of the loan recipient's request and justification for such delay. If, for any reason, the construction completion is being unreasonably delayed, as determined by the Department, a final construction observation may be immediately performed. The final construction observation by the Department is only for the purpose of determining loan allowable costs.
- (d) Within 30 days after the Department's final construction observation, the loan recipient must submit: final loan payment requests, approvable summary change orders for all construction contracts; record drawings for the entire project funded in whole or in part with WPCRLF funds; the engineer's certification of compliance with plans, specifications, and contract documents; final professional services contract amendments, if any; and all other administrative forms and documents required by the

loan agreement. **Loan payment requests submitted after this date are not allowable, regardless of when the costs were incurred.**

- (e) Any other submittals or actions required by the loan agreement must be performed when required and are subject to review and approval by the Department.

G. Loan Closeout Phase.

- (1) The Department or other designated parties may perform an audit of the WPCRLF loan project for the purpose of determining compliance with the WPCRLF loan agreement and to determine allowable costs, payments made to date, and any additional payments due the loan recipient or repayment due the Department. The Department will transmit to the loan recipient a copy of the audit report, if performed.
- (2) Upon submittal of the items required or upon expiration of the deadline in Rule 7.3.F.(6)(d) of these regulations, the Department will determine the final allowable costs. However, if at any time the loan recipient fails to comply with any deadline or requirement of these regulations or the loan agreement, the Department may immediately issue a final determination of allowable costs.
- (3) Upon determination of final allowable costs by the Department, the Department will transmit to the loan recipient the final determination of allowable costs and payments due the loan recipient or repayments due the State, and a final loan agreement between the loan recipient, the Department, and the State Tax Commission. The final determination letter will establish a 30-day appeal deadline and will require repayment of any overpayments with an interest penalty to begin accruing on the appeal deadline. The interest penalty will be as established in Rule 7.3.H.(6) of these regulations.
- (4) Unless, within 30 days after the date of the above final determination, the loan recipient submits a written appeal of the final determination, including a written justification of the reason for the appeal, and supporting documentation for any disputed costs of the final determination, the final determination of allowable costs will become the final allowable costs for purposes of WPCRLF loan payments and the loan agreement, and the loan recipient must execute and submit the final loan agreement within the timeframe established by the Department.
- (5) Should an appeal be submitted in accordance with (4) above, the disputes procedures established in Appendix F of these regulations will be followed in order to resolve the dispute and establish the final allowable costs. Upon resolution of a dispute of the final determination, the Department will transmit to the loan recipient a revised final loan agreement. The loan recipient must execute and submit to the Department the final loan agreement within the deadline established by the Department.

- (6) Upon receipt of an executed final loan agreement from the loan recipient, the Department will transmit the final loan agreement to the State Tax Commission for execution and return to the Department.
- (7) Upon receipt of the executed final loan agreement from the State Tax Commission, the Department will transmit a copy to the loan recipient, and repayment of the WPCRLF loan will commence under the terms of the executed final loan agreement.
- (8) If the project fails to perform properly at any time within the first year after the final construction observation performed by the Department, the loan recipient must immediately notify the Department of the reasons for lack of performance, submit an approvable schedule of corrective actions, and implement the corrective actions in accordance with the approved schedule.

H. Payments to WPCRLF Loan Recipients. Payments from the WPCRLF may be made under the following conditions:

- (1) Payments may only be requested by and made to loan recipients, in accordance with the WPCRLF loan agreement and the loan recipient's executed and approved contracts for eligible and allowable services and construction, for work performed within the project scope and budget period.
- (2) Payments may be requested no more often than on a monthly basis, except as allowed by the Department.
- (3) The loan recipient must deduct from all WPCRLF payment requests the amount of funds provided or to be provided from all other state and federal agency funding sources for allowable WPCRLF project costs.
- (4) Payment requests must be submitted by the loan recipient to the Department and must include the following:
 - (a) WPCRLF payment request form.
 - (b) Cumulative invoices, in accordance with the contracts for such work, for all costs for which payment is requested.
 - (c) Any other documents required by the loan agreement.
- (5) The timing of WPCRLF payments to the loan recipient will be as follows, provided the loan recipient is in compliance with the requirements of these regulations and provisions of the WPCRLF loan agreement:

- (a) Upon execution of the loan agreement, facilities planning and application costs may be requested and paid. No further payments may be requested and paid except as allowed below.
- (b) Payments for eligible land may be requested and paid immediately after loan agreement execution if the Department has approved the purchase price and the loan recipient has submitted a bona fide option to purchase or clear site certificates.
- (c) For each independent construction contract, upon completion of the requirements of Rule 7.3.D.(2) and (3) and E.(1) of these regulations, design and land acquisition costs related to that independent construction contract may be requested and paid.

Where any construction contract is dependent upon another to function, the requirements of Rule 7.3.D.(2) and (3) and E.(1) of these regulations must be met for all such construction contracts in order for the related design and land acquisition costs for the dependent contract to be requested and paid. No further payments may be requested and paid except as allowed below.

- (d) For each independent construction contract, upon receipt by the Department of the executed contract documents and the notice to proceed, professional services costs related to that independent construction contract may be requested and paid.

Where any construction contract is dependent upon another to function, all such executed construction contract documents and notice(s) to proceed must be submitted in order for the related professional services costs for the dependent contract to be requested and paid.

- (e) For each independent contract, upon receipt of the executed construction contract documents and notice to proceed for each construction contract, payments for allowable construction work may be requested and paid based upon in-place work or materials and equipment delivered to the construction location and as supported by invoices and verified as accurate by the engineer and loan recipient, less any retainage.

For any construction contract that is dependent upon another to function, upon receipt of all such executed construction contract documents and notice(s) to proceed, payments for allowable construction work may be requested and paid based upon in-place work or materials and equipment delivered to the construction location and as supported by invoices and verified as accurate by the engineer and loan recipient, less any retainage.

- (f) No more than 95% of all construction phase professional services will be paid prior to completion of the requirements of Section III.F.(6) of these regulations, and until the Department has determined the final allowable project costs. The remaining amount may only be paid with the final payment.
 - (g) The final payment may be paid after the Department has determined the final allowable costs. Additional amounts from prior payments may be withheld by the Department until the final payment, if the Department determines that the final payment amount would otherwise be insufficient for loan closeout purposes.
 - (h) The Department may establish conditions in the loan agreement that vary from the above, including delaying payments, when determined prudent.
- (6) Any payments made to the loan recipient which are at any time determined by the Department to be for costs not in accordance with the WPCRLF loan agreement, for ineligible or unallowable costs, or for costs apparently related to waste, fraud, abuse or illegal acts under state or federal law, must be repaid to the WPCRLF fund within 30 days of such notification by the Department. Interest may be charged on such delinquent repayments after expiration of the 30-day period at a rate of ten (10) percent per annum, compounded monthly. Alternatively, the Department may withhold such amounts including interest from subsequent payment requests.

I. WPCRLF Loan Repayment Requirements. All WPCRLF loan repayments are subject to the following requirements:

- (1) Interest on amounts paid to the loan recipient shall commence on the last construction contract completion date as established in the initial loan agreement for the project, or one year after the date in the initial loan agreement for issuance of the notice to proceed for the earliest construction contract, whichever occurs first.
- (2) The amount of interest accrued between the date established in (1) above and the initiation of the repayment process will be added to the final allowable project costs to determine the principal amount to be repaid by the loan recipient.
- (3) Repayments shall commence when determined by the Department, as established in the final loan agreement, and shall continue for the period established in the final loan agreement, in accordance with Rule 7.2 E.(1)(a) of these regulations. Repayments are to be made by counties on a semi-annual basis through homestead exemption annual tax loss reimbursement withholdings if adequate to provide such repayments, by municipalities on a monthly basis through state sales tax withholdings if adequate to provide such repayments and by all other loan

recipients through submission of monthly repayments, in accordance with state law.

- (4) The repayment interest rate and the frequency of interest compounding will be as established in the IUP under which the project is funded.

J. Administrative Fee.

An administrative fee in the amount of five percent (5%) of the final loan principal amount will be collected from the loan repayment amounts to defray the costs of administering the WPCRLF program. Beginning with the initiation of the repayment process and until such time that the total administrative fee is collected, the interest portion of each repayment will not be charged, and, in lieu of the interest portion, an equal amount of the repayment will be collected as the administrative fee.

Source: *Miss. Code §§ 49-17-81 through 49-17-89, 49-2-1, et seq. and 49-17-1, et seq.*

APPENDIX A

Determination of Eligible and Allowable Costs

CONTENTS

- A. General
- B. Professional Services
 - (1) Allowable
 - (2) Unallowable
- C. Construction
 - (1) Allowable
 - (2) Unallowable
- D. Equipment, Materials, and Supplies
 - (1) Allowable
 - (2) Unallowable
- E. Change Orders
- F. Claims
 - (1) Allowable
 - (2) Unallowable
- G. Mitigation
 - (1) Allowable
 - (2) Unallowable
- H. Publicly Owned Onsite Systems
 - (1) Allowable
 - (2) Unallowable
- I. Real Property and Existing Improvements
 - (1) Allowable
 - (2) Unallowable
- J. Miscellaneous Costs
 - (1) Allowable
 - (2) Unallowable
- K. Project Income
 - A. General

Eligible costs are those costs in which WPCRLF loan participation is authorized pursuant to applicable statute. Allowable costs are eligible costs that meet the following general criteria in addition to any specific identification as an allowable cost within Appendix A:

- (1) Are necessary and reasonable for the proper and efficient administration and construction of the project, be allocable to the project, and not be a general expense required to carry out the overall responsibilities of the loan recipient.
- (2) Are authorized or not prohibited under state or local laws or regulations.
- (3) Conform to any limitations or exclusions set forth in state laws or other governing limitations as to types or amounts of cost items.
- (4) Are consistent with policies, regulations, and procedures that apply uniformly to both state assisted and other activities of the loan recipient.
- (5) Are accorded consistent treatment through the application of generally accepted accounting principles appropriate to the circumstances.
- (6) Are not allocable to, or included as, a cost of any other federally or state financed program in either the current, prior, or future period.
- (7) Are determined allowable by the Department after review of necessary books, records and other documents related to the costs. Failure to cooperate with the Department regarding access to project records or refusal to provide such records when requested by the Department may result in costs being determined unallowable for WPCRLF participation.
- (8) Are within the scope and budget period of the project as described in the loan agreement.
- (9) Are determined without regard to any previous federal grant, WPALP, WPCELF or WPCRLF loan funding provided for facilities to be replaced, upgraded, or rehabilitated, except as described in Rule 7.2. F.(2)(d) and (e) of these regulations.
- (10) Notwithstanding this appendix, are eligible and allowable under the federal Clean Water Act and any implementing federal regulations.
- (11) Are procured in accordance with Appendix C.

B. Professional Services

The term “professional services” refers to engineering, legal, administrative, and similar services.

- (1) Allowable costs include:

- (a) Costs that are normally included in the fringe benefits and indirect cost of the firm except those costs specifically excluded in these regulations.
- (b) Profit, not to exceed the amount normally charged by the firm for similar work.
- (c) Preparing the facilities plan.
- (d) Preparing the plans, specifications, and contract documents, including value engineering.
- (e) Preparing the loan application package.
- (f) Costs associated with the acquisition of real property, permanent and temporary construction easements and compliance with the requirements of the Mississippi Real Property Acquisition Policies Law.
- (g) The costs of services incurred during the advertisement, award and construction of a project.
- (h) The costs associated with acquiring minority and women's business services.
- (i) The cost of developing an operation and maintenance manual.
- (j) Start-up services for onsite training of operating personnel in operation and control of specific treatment processes, laboratory procedures, and maintenance and records management.
- (k) Administrative services associated with the construction of the project and administering the WCPRLF loan.
- (l) The cost of services, other than engineering services during construction, such as railway or highway flagmen, or utility or highway inspectors, required during the construction of the project, are allowable provided that:
 - i. The entity responsible for the affected railway, highway, or utility requires such services for all parties conducting similar types of work, regardless of the source of construction funding for the project, or the services are required by law.
 - ii. The cost of such services has not been included in the construction contractor's bid price.

- (m) Engineering services or other services necessary to correct omissions in the facilities plan, design drawings and specifications or other documents to the extent that such costs would have been allowable for preparing omission free documents.
- (2) Unallowable costs include:
 - (a) Engineering services or other services necessary to correct defects in the facilities plan, design drawings and specifications, or other documents.
 - (b) Public liaison services.
 - (c) Bad debt.
 - (d) Entertainment costs.

C. Construction

Eligible projects may include treatment works, nonpoint source management projects, and estuary conservation and management projects.

- (1) Allowable costs include:
 - (a) The costs of contracts for allowable construction work on the project, including prime contracts, subcontracts and the direct purchase of equipment, materials and supplies by the loan recipient.
 - (b) The costs of sewer system rehabilitation (including rehabilitation of allowable service lines) necessary to eliminate or prevent infiltration/inflow, bypasses or overflows, or to provide proper operation of the treatment works.
 - (c) The cost of treatment works capacity adequate to transport and treat infiltration/inflow that will remain in the system.
 - (d) Treatment works which serve industrial or commercial users when such works are publicly owned.
 - (e) Reserve capacity within a design period of up to twenty years (forty years for interceptors, including pump stations and force mains serving as interceptors).
 - (f) Implementation of a nonpoint source management program established under Section 319 of the Act and development and implementation of an estuary conservation and management plan under Section 320 of the Act.

On projects which are also designed to provide for drainage, flood control, or any purposes other than control of pollutants or estuary conservation, only the portion of the project needed for control of pollutants or estuary conservation shall be allowable.

- (g) Construction of treatment and transportation facilities for control of pollutant discharges from a separate or combined storm sewer system.

On such projects which are also designed to provide for drainage, flood control, or any purposes other than control of pollutants, only the portion of the project needed for control of pollutants is allowable.

- (h) The cost associated with the preparation of the project site before, during and, to the extent provided in the loan agreement, after construction. These costs include:

- (i) The cost of demolition of existing structures on the project site if construction cannot be undertaken without such demolition. Demolition of existing structures on the project site when not required for constructing the project, will be considered to be an allowable cost only if the existing structures constitute a real and present hazard to safety, public health, or water quality which can best be abated by the removal of the existing structures.

- (ii) The cost of removal, relocation or replacement of utilities, provided the loan recipient is legally obligated to pay for such by law.

- (iii) The cost of restoring streets and rights-of-way to their original condition. The need for such restoration must result directly from the construction and is generally limited to repaving the width of trench.

- (i) For wastewater collection projects which provide sewers to existing buildings, service lines between the public sewer and the point five (5) feet from the outside wall of existing residences and public buildings are allowable. Service lines between the public sewer and the property line of existing businesses are allowable.

- (2) Unallowable costs include:

- (a) Construction and construction related costs which occur after the allowable completion date established by the Department.
 - (b) Treatment works which serve federal users exclusively or almost exclusively.

- (c) Bonus payments for completion of construction before a contractual completion date unless required by state law.

D. Equipment, Materials, and Supplies

(1) Allowable costs include:

- (a) The cost of a reasonable inventory of laboratory chemicals and supplies necessary to initiate plant operations and laboratory items necessary to conduct tests required for plant operation.
- (b) The costs for purchase and/or transportation of biological seeding materials required for expeditiously initiating the treatment process operation.
- (c) The cost of shop equipment installed at the treatment works necessary to the operation of the works. The need will depend on the specific item, its frequency of expected use, and the size and complexity of the treatment facility. Larger treatment facilities will have a greater need for installed shop equipment than smaller ones. Where the proposed items of equipment are inappropriate to the size and/or complexity of the treatment works, the Department may determine that the proposed equipment is unallowable.
- (d) The costs of necessary and reasonable safety equipment, provided the equipment meets applicable federal, state, local or industry safety requirements.
- (e) The costs of necessary and reasonable collection system maintenance equipment.
- (f) The cost of mobile equipment necessary for the operation of the overall wastewater treatment facility, transmission of wastewater or sludge, or for the maintenance of equipment. These items include:
 - (i) Portable stand-by generators.
 - (ii) Large portable emergency pumps to provide “pump-around” capability in the event of pump station failure or pipeline breaks.
 - (iii) Sludge or septage tankers, trailers, and other vehicles having as their sole purpose the transportation of liquid or dewatered wastes from the collector point (including individual or onsite systems) to the treatment facility or disposal site.

- (iv) Tillage, planting, landspreading and harvesting equipment that is documented as necessary and reasonable for land treatment process and other vehicles demonstrated necessary to the facility and approved in advance by the Department.
- (g) Replacement parts identified and approved in advance by the Department as necessary to assure uninterrupted operation of the facility, provided they are critical parts or major systems components which are:
 - (i) not immediately available and/or whose procurement involves an extended “lead-time” or
 - (ii) identified as critical by the equipment supplier(s), but not included in the inventory provided by the equipment supplier(s).
- (h) Wastewater and drinking water flow metering devices used for wastewater billing purposes.
- (i) The cost of furnishings, office equipment, and maintenance equipment dedicated solely to the pollution control project. Necessary and reasonable office furnishings and equipment include chairs, desks, file cabinets, typewriters, coffee tables, telephones, office supplies, calculators, copiers, book cases, shelves and lamps. Ordinary site and building maintenance equipment such as lawnmowers, rakes, shovels, brooms, picks, hedge trimmers, and other such equipment. Hand tools such as screw drivers, pliers, socket wrenches, electric drills or saws, etc.
- (j) Computers. Computers, display monitors, and computer software which are designed into the control system for the daily operations of the treatment works.

Computers are also allowable if they are to be used for the operational control and analysis of the treatment works. Examples of such allowable uses include the scheduling of equipment maintenance and replacement, the operation of the loan recipient’s pretreatment program, including the scheduling of tests to verify industrial compliance with pretreatment requirements, and for accounting and billing services.

The cost of computer software specifically designed for the operation and maintenance of the treatment works is also allowable for loan participation. This includes the cost of developing unique operation programs for the specific loan funded project.

(2) Unallowable costs include:

- (a) The costs of equipment or material procured in violation of Appendix C.

- (b) The cost of vehicles for the transportation of the loan recipient's employees, including buses, trucks, cars, motorcycles, golf carts, bicycles, etc.
- (c) Items of routine "programmed" maintenance such as ordinary piping, air filters, couplings, hoses, belts, etc.
- (d) Radios, televisions, VCRs, camcorders, and other items of a similar nature.
- (e) Large stocks of laboratory and other chemicals and supplies above a reasonable inventory necessary to initiate plant operations.

E. Change Orders

- (1) Change order costs are allowable provided they are:
 - (a) Necessary and reasonable.
 - (b) Within the scope of the project.
 - (c) Not caused by the loan recipient's mismanagement.
 - (d) Not caused by the loan recipient's vicarious liability for the improper actions of other.
 - (e) In conformance with the WPCRLF regulations.
- (2) Provided the above requirements are met, the following costs are allowable change orders.
 - (a) Construction costs resulting from defects in the plans, design drawings and specifications or other contract documents only to the extent that the costs would have been incurred if the contract documents on which the bids were based had been free of the defects and excluding the costs of any rework, delay, acceleration or disruption caused by such defects.

If the defect is realized after substantial construction work has been completed, and therefore required rework, delay, or additional work beyond that which would have been required by defect free drawings, the cost would still be allowable, but the additional cost of rework or delay is unallowable.

The additional cost is measured as the difference between the cost which would have been included in the bid based on defect free drawings and the actual cost of the change order.

- (b) Equitable adjustments for differing site conditions.

F. Claims

- (1) Allowable costs, provided the costs are properly documented, incurred and requested prior to the end of the 30 day period established by Rule 7.3.F.(6)(d) of these regulations, include:

- (a) The costs of legal, engineering, and other services incurred by the loan recipient in deciding procurement protests and defending their decisions in protest appeals under Appendix I are allowable regardless of the outcome of the protest, provided there was not an attempt by the loan recipient to violate or circumvent state law.
- (b) The costs of assessing the merits of, negotiating, or defending against a claim against the loan recipient are allowable, regardless of the outcome, provided that the matter under dispute is not the result of fraudulent or illegal actions or mismanagement on the part of the loan recipient.
- (c) Amendments or change orders in construction, engineering, legal, etc., contracts as a result of settlements, arbitration awards, or court judgments are allowable to the same extent that they would have been allowable had there not been a claim.

- (2) Unallowable costs include:

- (a) Claims arising from work outside the scope of the loan.
- (b) Claims resulting from fraudulent or illegal activities.
- (c) Claims resulting from mismanagement by the loan recipient.
- (d) Claims resulting from the loan recipient's vicarious liability for the improper action(s) of others.
- (e) The cost of settlements, arbitration awards or court judgments over and beyond the allowable costs had there not been a claim, as established in these regulations.

G. Mitigation

- (1) Allowable costs include:

- (a) Costs necessary to mitigate only direct, adverse, physical impacts resulting from construction of the project.
- (b) The costs of reasonable site screening necessary to comply with facilities plans and necessary to screen adjacent properties.
- (c) The cost of groundwater monitoring facilities necessary to determine the possibility of groundwater deterioration, depletion or modification resulting from construction of the project.

The extent of the allowable costs for groundwater monitoring facilities is decided on a case-by-case basis and depends on the size and complexity of the project and the present and potential future use of the groundwater.

(2) Unallowable costs include:

- (a) The costs of solutions to aesthetic problems, including design details which require expensive construction techniques and architectural features and hardware, that are unreasonable or substantially higher in cost than approvable alternatives and that neither enhance the function or appearance of the treatment works nor reflect regional architectural tradition.
- (b) The cost of land acquired for the mitigation of adverse environmental effects identified pursuant to an environmental review.

H. Publicly Owned Onsite Systems

(1) Allowable costs include:

- (a) The cost of major rehabilitation, upgrading, enlarging, and installation of onsite systems.

Major rehabilitation may include the demolition and removal of an existing privately or publicly owned onsite system in accordance with Section C.(1)(h)(i) of this appendix.

- (b) Collection or service lines to an offsite treatment unit which serves a cluster of buildings.
- (c) The cost of restoring individual system construction sites to their original condition.

(2) Unallowable costs include:

- (a) Those portions of treatment works which have surface discharges from individual residences or clusters, unless each discharge has a valid NPDES permit.
- (b) Modification to physical structure of homes, commercial buildings, or any other structures which are not a part of the public treatment works project.
- (c) Wastewater generating fixtures such as commodes, sinks, tubs, and drains.

I. Real Property and Existing Improvements

(1) Allowable costs include:

- (a) The cost of land that will be an integral part of the treatment process, such as for land treatment facilities, acquired in accordance with the Mississippi Real Property Acquisition Policies Law in fee simple title or by easement.

Except as allowed under Section I.(2) below, such land must be acquired at fair market value based on an appraisal or a condemnation proceeding, unless the purchase price of a parcel is \$10,000 or less. These costs include:

- (i) The cost of a reasonable amount of land acquired for the construction of land treatment works, considering the need for buffer areas, berms, and dikes. Buffer areas may be designed as part of the project to conform with Mississippi Environmental Quality Permit Board regulations, to screen sites from public view, to control public access, and to improve aesthetics.
 - (ii) The cost of land acquired for land application of sludge, composting or temporary storage of compost residues which result from wastewater treatment.
 - (iii) Where properties are only partially acquired for project purposes, necessary compensation of property owners for the reduced value of their remaining land.
- (b) The cost of acquiring all or part of an existing publicly or privately owned wastewater treatment works and necessary land for a consolidation project, provided all of the following criteria are met:
 - (i) The acquisition is for the purpose of providing new pollution control benefits from the acquisition itself or through the subsequent action committed to by the loan recipient, including but not limited to upgrade, expansion, rehabilitation or removal from service of the treatment works. The costs associated with these

actions may be a part of the loan project as allowed by Section C of this appendix.

- (ii) The primary purpose of the acquisition is not the reduction, elimination, or redistribution of public or private debt; and
 - (iii) The acquisition does not circumvent federal, state or local requirements.
- (c) The cost of complying with the requirements of the State's Real Property Acquisition Policies Law.

(2) Unallowable costs include:

- (a) For parcels costing over \$10,000, any amount paid by the loan recipient for allowable land in excess of fair market value, based on an appraisal or any condemnation proceeding.
- (b) For parcels costing over \$10,000, an amount other than the determination of fair market value may be found allowable through an administrative settlement if the loan recipient provides sufficient written documentation to the Department that it is reasonable, prudent and in the public interest, such as when negotiated purchase is unsuccessful and condemnation action may entail a long delay or excessive costs. Documentation may include evidence of purchase negotiations, real property sales data, estimated court settlement and legal costs based on previous condemnation proceedings.
- (c) The cost of land acquired for the mitigation of adverse environmental effects identified pursuant to an environmental review.

J. Miscellaneous Costs

(1) Allowable costs include:

- (a) On force account projects, the costs of equipment, materials and supplies necessary for the project.
- (b) Unless otherwise specified in these regulations, the costs of meeting specific legal requirements directly applicable to the project.
- (c) Costs for necessary travel directly related to accomplishment of project objectives, such as costs of loan recipient employees attending training workshops/seminars that are necessary to provide instruction in administrative, fiscal or contracting procedures required to complete the construction of the treatment works.

- (d) Cost of royalties for the use of, or rights in, a patented process or product.

Royalties associated with the procurement of the right to use, or the rights in, a patented product, apparatus, or process are allowable costs, provided that they are based on a published fee schedule or on reasonable fees charged to other users under similar conditions.

- (e) Buildings

Allowable costs for buildings include those portions of the buildings which are directly related to the project, including buildings housing equipment and unit processes, laboratories; employee locker rooms; workshop areas, storage facilities for operational supplies, spare parts and equipment; necessary lavatory facilities, operator office space; etc. Those portions of an administration building which are not necessary for the daily operation and maintenance of the project are unallowable costs, including portions of the building used for public works functions (other than wastewater treatment), general accounting functions, conference rooms with associated audio-visual equipment, or other general uses not necessary for the operation of the project. Where larger facilities include conference rooms to be used exclusively for training of employees, such space is allowable if reasonable and if approved by the Department as part of the loan award.

Where unallowable building space is included in an otherwise allowable administration building, the allowable cost is determined by using the ratio of allowable floor space divided by the total floor space in the building. The costs of buildings and portions of buildings which are unallowable are to be deducted from the allowable project construction costs for loan computation purposes. Costs associated with unallowable buildings and portions of buildings (e.g., landscaping, driveways, parking spaces, electrical service, and other utility costs) are also unallowable and must be deducted proportionately from the allowable construction costs.

- (f) Facilities For Income Generation from Processed Sludges and Crops

Facilities which have the potential for generating project income to offset O&M costs are allowable if they are necessary to provide stabilized and processed sludges which are to be managed for income generation or crops which are grown for sale as an integral part of the wastewater land treatment or sludge utilization process.

Facilities and equipment built for processing crops grown on land to which sludge or wastewater has been applied may be an allowable cost if the recipient has all financial interest in the crop and if those facilities are

necessary and reasonable to prepare the crop for prompt delivery to its market.

Facilities built for processing crops or sludge into marketable products such as compost or heat-dried pellets may be allowable if those facilities are necessary and reasonable to cost-effectively prepare the product for prompt delivery to its market. Facilities to store the marketable products to get more favorable prices, to transport the product for sale to a market, or to optimize marketing of the product, such as bagging operations, are also allowable.

(2) Unallowable costs include:

- (a) Ordinary operation expenses of the loan recipient including salaries and expenses of the loan recipient's employees and elected and appointed officials and preparation of routine financial reports and studies.
- (b) Administrative, engineering and legal activities associated with the establishment of departments, agencies, commissions, regions, districts or other units of government.
- (c) Approval, preparation, issuance and sale of bonds or other forms of indebtedness required to finance the project and the interest on them.
- (d) Personal injury compensation or damages arising out of the project.
- (e) Fines and penalties due to violations of, or failure to comply with, federal, state or local laws, regulations or procedures, and related legal expenses.
- (f) Costs outside the scope or budget period of the approved project.
- (g) Costs for which payment has been or will be received from another state or federal source.
- (h) If a treatment works includes any reserve capacity which induces development on environmentally sensitive lands such as wetland, flood plains, etc. the cost of the entire treatment works will be unallowable.
- (i) Operation and maintenance costs of the treatment works.
- (j) Lease payments.
- (k) Periodic payment of royalties for the right to operate under a patent is considered an operational cost and is unallowable for loan participation.

K. Project Income:

Project income from the following sources shall have no effect on the determination of allowable and unallowable costs:

- (1) Bid bond forfeitures.
- (2) Liquidated damages.
- (3) Interest income on WPCRLF payments to loan recipients.

APPENDIX B

State Environmental Review Process [For Projects Defined Under Section 212 of the Act]

A. Facilities Plan Description of Environmental Impacts

Each project's facilities plan must contain a comparative evaluation of the no-action alternative and the proposed alternative which accounts for the beneficial and adverse consequences to the existing and future environmental resources as follows and any corresponding mitigative measures necessary to protect these resources:

- (1) Surface and groundwater resources.
- (2) Archaeological/historical/cultural resources.
- (3) Vegetative/wildlife resources.
- (4) Wetlands and navigable waterways.
- (5) Floodplains.
- (6) Coastal zones.
- (7) Wild and scenic rivers.
- (8) Air Quality.

B. Environmental Review

The information, processes, and premises that influence an environmental determination are as follows. The Department will take one or more of the following actions pursuant to the review of the facilities plan description of environmental impacts and any comments generated by the Intergovernmental Review Agencies:

(1) Finding of No Significant Impact on the Environment

The Department will issue a Finding Of No Significant Impact (FONSI) when, based upon review of the facilities plan and any intergovernmental review agency comments, it appears that a project will not have a significant adverse environmental impact.

(2) Environmental Impact Statement

If the Department determines that the project does not qualify for a FONSI, an Environmental Impact Statement (EIS) will be prepared in general conformance with EPA regulation 40 CFR Part 6, or as deemed appropriate by the Department.

(3) Amendments

Amendments are occasionally needed to describe changes to proposed facilities that have already been described in a FONSI or EIS. The Amendment will

describe the changes and any expected new impacts on the environment due to the changes.

(4) Reaffirmation of an Environmental Action

If five years will pass between the issuance of a FONSI, EIS or Amendment and the offer of WPCRLF funding, the environmental impact of the project will be reevaluated. If there have been no significant changes, the Department will issue a reaffirmation of the environmental action. If the original environmental action cannot be reaffirmed, the Department will issue a new environmental action, as appropriate.

(5) No Further Action

The Department will issue a FONSI or EIS for all WPCRLF projects. If there are significant changes in the project after the issuance of the environmental document, those changes will be described in an Amendment. Some changes are minor, however, and the Department may determine that a separate Amendment need not be issued. Such minor changes may include, but are not limited to:

- (a) Changes in the size of pump stations, force mains, interceptor sewers, or collection sewers.
- (b) Minor changes in the size of wastewater treatment unit processes.
- (c) Minor rerouting of sewer lines when the new route will not adversely affect cultural resources, habitats of endangered or threatened species, environmentally important natural resource areas, or other environmental resources. All affected property owners must be notified of the rerouting by the loan recipient and must be provided an opportunity to comment on the proposed rerouting prior to initiation of construction.

C. Issuance of the Environmental Action

Copies of all environmental actions will be provided to the appropriate intergovernmental review agencies listed in Rule 7.3.A.(2)(f). Copies of environmental actions will also be sent to any agency, group or individual requesting them. All environmental actions will also be published in an appropriate local newspaper.

All environmental actions will provide for at least a thirty day period from the date of publication to receive comments from agencies groups, or individuals. All such comments will be evaluated by the Department before finalizing any environmental action.

D. Resolution of Adverse Comments

Adverse comments received as a result of the environmental review process will be addressed in the following manner:

- (1) The Department will first require the loan recipient to attempt to resolve the adverse comments.
- (2) If the loan recipient is unable to resolve the adverse comments, the Department will render a decision concerning the adverse comments.
- (3) Should the loan recipient or the party which originally made the adverse comments desire to appeal the above decision, a request for an informal hearing must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Executive Director, and the affected parties. The Executive Director will render a decision on the appeal as a result of the informal hearing.
- (4) Should the loan recipient or the party which originally made the adverse comments desire to appeal the above informal hearing decision, a request for a formal hearing by the Commission must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission will hold a formal hearing to consider the matter and will render a decision.
- (5) Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

APPENDIX C

Procurement Requirements for WPCRLF Loan Recipients

In the procurement of all construction, equipment, materials, supplies, professional and non-professional services and all other costs related to the WPCRLF project, all loan recipients must comply with state purchasing laws as they relate to local governments.

The procurement and conduct of all professional engineering and land surveying services must also be in accordance with the Code of Conduct and other guidance and interpretations established by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

The procurement and conduct of all construction contracts must also be in accordance with the rules and regulations of the Mississippi State Board of Contractors and other guidance and interpretations established by the Mississippi State Board of Contractors.

The loan recipient understands and agrees that it will include in all its contracts those contract provisions required in Appendix L of these regulations.

All loan recipients must submit a procurement certification stating that the loan recipient has reviewed the proposed costs in sufficient detail to determine that these costs are reasonable and indicating that all of the above referenced requirements have been and will be met. If any of the above procurement requirements are violated, the Department may determine that the related costs are unallowable and may require repayment of all WPCRLF Loan funds paid for such costs, in accordance with Rule 7.3.H.(6) of these regulations.

APPENDIX D

Minority and Women's Business Enterprise (MBE/WBE) Requirements

These MBE/WBE requirements apply to all projects funded within a fiscal year in which federal capitalization grants to the Department require such compliance. The Department will establish "fair share" objectives for participation by minority and women's business enterprises in WPCRLF funded projects. The loan recipient must undertake the following steps in the procurement of materials, equipment, supplies, and construction:

- (1) Include qualified minority and women's businesses on solicitation lists,
- (2) Assure that minority and women's businesses are solicited whenever they are potential sources,
- (3) Divide total requirements, when economically feasible, into small tasks or quantities to permit maximum participation by minority and women's businesses,
- (4) Establish delivery schedules, when practical which will encourage participation by minority and women's businesses,
- (5) Use the services of the Minority Business Enterprises Division of the Mississippi Development Authority and the Contract Procurement Centers of the U.S. Department of Commerce, as appropriate, and
- (6) Require the contractor to take the five (5) steps listed above, if the contractor awards subcontracts.

The loan recipient, engineer, and prime contractor(s) must also follow the guidance in the Department document "Utilization of Minority and Women's Business Enterprises."

Minority and women's business enterprises must be certified by the Mississippi Development Authority or the Mississippi Department of Transportation.

APPENDIX E

Debarment and Suspension

The Department is prohibited from entering into loan agreements with loan applicants that have been debarred or suspended by any state or federal agency.

Loan recipients are prohibited from entering into contractual agreements with individuals, businesses, organizations, or any other entities that have been debarred or suspended by any state or federal agency.

Loan recipients are responsible for ensuring that prime contractors utilized on the project are not debarred or suspended. Likewise, prime contractors are responsible for ensuring that subcontractors utilized on the project are not debarred or suspended.

Anyone may contact the Department concerning the existence of a cause for debarment or suspension. The Department may refer the matter to the State Attorney General or other appropriate office for further investigation. If, after review or investigation, the Department reasonably believes that a cause for debarment exists, the Department may propose debarment or suspension and may initiate procedures similar to, but not necessarily identical to, federal regulation 40 CFR Part 32: Debarment and Suspension Under EPA Assistance Programs.

Such above described debarment or suspension actions will not affect existing executed contractual agreements, unless such agreements have been terminated or suspended under the terms of the agreement by the loan recipient.

APPENDIX F

WPCRLF Loan Recipient/Department Disputes Procedures

Only WPCRLF loan recipients may submit a notice of dispute (disagreement) with a decision made by the Department, with the exception of decisions regarding Appendix B, State Environmental Review Process, of these regulations. The following procedures will be used to resolve disputes between the loan recipient and the Department:

- (1) Within any deadlines established by the Department, the loan recipient must submit a written notice of dispute with a Department decision, including a summary of the dispute and reasons the loan recipient believes the Department decision should be reversed.
- (2) The Department staff will then render a written decision on the dispute and will include reasons for the decision.
- (3) Should the loan recipient desire to appeal the Department staff decision, a request for an informal hearing must be received by the Department within 30 days after the date of the Department staff decision. Upon receipt of such a request, an informal hearing will be held with staff members, as designated by the Executive Director, and the affected parties. The Executive Director will render a decision on the appeal as a result of the informal hearing.
- (4) Should the loan recipient desire to appeal the above informal hearing decision, a request for a formal hearing before the Commission must be received by the Department within 30 days after the date of such decision. Upon receipt of such a request, the Commission will hold a formal hearing to consider the matter and will render a decision.
- (5) Appeals of the above formal hearing decision may be made to the Chancery Court in accordance with state law.

APPENDIX G

Waste, Fraud and Abuse

The loan recipient is responsible for preventing, detecting, and prosecuting waste, fraud, abuse, and all other corrupt practices which occur in relation to the WPCRLF loan project.

If the loan recipient becomes aware of any allegation, evidence, or the appearance of corrupt practices, the loan recipient must:

- (1) Immediately inform the Department in writing.
- (2) Promptly pursue available state and local legal, administrative, and contractual remedies.

The Department may disallow costs under the WPCRLF loan agreement when the costs are determined to be related to waste, fraud, abuse or other corrupt practices. The Department may also require repayment of WPCRLF loan funds paid for such costs in accordance with Rule 7.3.H.(6) of these regulations.

APPENDIX H

Loan Recipient Accounting and Auditing Requirements

All WPCRLF loan recipients must maintain project accounts in accordance with generally accepted government accounting standards, as defined by the Guidelines of the Municipal Accounting and Audit Manual, as prescribed by the State Auditor's Office. Charges to the project account must be properly supported, related to allowable construction costs, and documented by appropriate records. These project accounts must be maintained as separate accounts. Projects shall have audits conducted in accordance with the Federal Single Audit Act Amendments of 1996, P.C. 104-156, and Section 21-35-31 of the Mississippi Code.

APPENDIX I

Procurement Protest Procedures

This Appendix sets forth the process for the resolution of procurement protests filed with the loan recipient by an adversely affected party. The Loan Recipient's protest procedures must include these requirements:

- (1) Prior to advertisement for bids, the loan recipient must establish its own procedures for prompt consideration of initial protests concerning solicitations or contract awards. A "protest" is a written complaint concerning the loan recipient's solicitation or award of a contract. The protest must be filed with the loan recipient by a party with a direct financial interest adversely affected by a loan recipient's procurement action and must be filed in accordance with and within the time frame established by the loan recipient's protest procedures.
- (2) Any party which transmits any document concerning the protest during the course of a protest and protest resolution must simultaneously furnish all other affected parties with a copy of all documents in the transmittal.
- (3) Upon receipt of a protest, the loan recipient must make a determination on the protest in accordance with the loan recipient's protest procedures within thirty (30) calendar days after such protest or sooner, if so required by the loan recipient's procurement protest procedures.
- (4) The party with a direct financial interest adversely affected by a loan recipient's determination of the protest may appeal such a determination only through the appropriate court of competent jurisdiction, provided such appeal is initiated within seven (7) calendar days after receipt of the determination.
- (5) Any delay due to a protest or protest resolution will not relieve the loan recipient of the requirement to meet the project schedule established in the loan agreement, nor will such delays prevent the Department from pursuing the remedies for default established in the loan agreement.

APPENDIX J

Applicable State and Federal Laws, Regulations, and Executive Orders

During the planning, design, construction, and operation of the project, the loan recipient shall comply with all applicable laws and regulations and shall acquire all applicable permits as described in the Departmental publication “Environmental Permit Directory,” or its successor. The applicable related state and federal laws and regulations are listed below. The WPCRLF regulations are not complete without these laws and regulations:

State Laws and Regulations

- A. Guidelines for Review of Siting Criteria in Applications for Air and Water Pollution Control Permits.
- B. Mississippi Water Quality Criteria for Intrastate, Interstate and Coastal Waters.
- C. Mississippi Nonhazardous Waste Management Regulations.
- D. Mississippi Coastal Wetlands Protection Law, Section 49-27-1 through 49-27-69 of the Mississippi Code Annotated, (Supp. 1989) et seq.
- E. Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants.
- F. Wastewater Permit Regulations for National Pollutant Discharge Elimination System (NPDES), Underground and Injection Control (UIC) and State Operating Permits.
- G. The Nongame and Endangered Species Conservation Act, Sections 49-5-101 through 49-5-119 of the Mississippi Code.
- H. The State Antiquities Law, Section 39-7-3, et seq. of the Mississippi Code of 1972.
- I. State of Mississippi Regulations for the Certification of Municipal and Domestic Wastewater Facility Operators.
- J. Mississippi Municipal and Domestic Water and Wastewater System Operators Certification Act of 1986, Sections 21-27-201 through 21-27-221 Mississippi Code of 1972 Annotated.
- K. Mississippi State Purchasing Laws, Title 31, Mississippi Code 1972 Annotated.
- L. Mississippi State Engineering and Surveying Law, Sections 73-13-1 through 73-13-99 Mississippi Code 1972 Annotated, and rules and regulation of procedure promulgated thereunder by Mississippi State Board of Registration for Professional Engineers and Land Surveyors.

- M. Mississippi Real Property Acquisition Policies Law Sections 43-37-1 through 13.
- N. Mississippi Code Section 21-35-21, annual audits required.

Federal Laws and Executive Orders

- A. Age Discrimination Act of 1975, Pub. L. 94-135.
- B. Civil Rights Act of 1964, Pub. L. 88-352.
- C. Section 13 of the Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500 (the Clean Water Act), which prohibits sex based discrimination.
- D. Section 504 of the Rehabilitation Act of 1973, Pub. L. 93-112 (including Executive Orders 11914 and 11250).
- E. Environmental Justice, Executive Order 12898.
- F. Single Audit Act Amendments of 1996, P.L. 104-156.

APPENDIX K

Loan Agreement Defaults and Remedies

Each of the following events is a default of a loan agreement:

- (1) Failure of the Loan Recipient to make any loan repayment when it is due and such failure shall continue for a period of thirty (30) days.
- (2) Failure to comply with the provisions of the Agreement or in the performance or observance of any of the covenants or actions required by the Agreement.
- (3) Any warranty, representation or other statement by, or on behalf of, the Loan Recipient contained in the Agreement or in any information furnished in compliance with, or in reference to, the Agreement, which is false or misleading in any material respect.
- (4) An order or decree entered, with the acquiescence of the Loan Recipient, appointing a receiver of any part of the Project or Revenues thereof; or if such order or decree, having been entered without the consent or acquiescence of the Loan Recipient, shall not be vacated or discharged or stayed on appeal within sixty (60) days after the entry thereof.
- (5) Any proceeding instituted, with the acquiescence of the Loan Recipient, for the purpose of effecting a compromise between the Loan Recipient and its creditors or for the purpose of adjusting the claims of such creditors, pursuant to any federal or state statute now or hereafter enacted, if the claims of such creditors are payable from Revenues of the Project.
- (6) Any bankruptcy, insolvency or other similar proceeding instituted by, or against, the Loan Recipient under federal or state bankruptcy or insolvency laws now or hereafter in effect and, if instituted against the Loan Recipient, is not dismissed within sixty (60) days after filing.
- (7) Failure to give timely notice of default as required below when such failure shall continue for a period of thirty (30) days.

The Loan Recipient shall give the Department immediate written notice of an event of default. Upon any event of default and subject to the rights of bondholders with prior liens, the Department may enforce its rights by utilizing one or more of the following remedies:

- (1) By mandamus or other proceeding at law or in equity, cause to establish and collect fees and charges for use of the Project and to require the Loan Recipient to fulfill the Agreement.
- (2) By action or suit in equity, require the Loan Recipient to account for all moneys received from the Department or from the ownership of the Project and to account for the receipt, use, application or disposition of the Revenues.

- (3) By action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the Department.
- (4) By applying to a court of competent jurisdiction, cause to appoint a receiver to manage the Project, establish and collect fees and charges, and apply the Revenues to the reduction of the obligations under the Loan Agreement.
- (5) By certifying to the Tax Commissioner delinquency on loan repayments, the Department may intercept the delinquent amount, plus ten (10) percent annual penalty interest on the amount due to the Department, from any unobligated funds due to the Loan Recipient under any revenue or tax sharing fund established by the State. Penalty interest shall accrue on any amount due and payable beginning on the thirtieth (30th) day following the date upon which payment is due. The penalty interest shall be compounded monthly.
- (6) By notifying financial market credit rating agencies.
- (7) By administratively charging or suing for payment of amounts due, or becoming due, plus ten (10) percent annual penalty interest which shall accrue on any amount due and payable beginning on the thirtieth (30th) day after such notification by the Department, together with all costs of collection, including attorneys' fees. The penalty interest shall be compounded monthly.
- (8) By accelerating the repayment schedule or increasing the interest rate.
- (9) By withholding payments to the Loan Recipient.
- (10) By terminating the Agreement, after providing thirty (30) days written notice of such intent to terminate the Agreement. Such termination will not affect the duty of the Loan Recipient to repay loan funds paid thus far.

No delay or omission to exercise any right or power accruing upon event of default shall impair any such right or power or shall be construed to be a waiver of any such default or acquiescence therein, and every such right and power may be exercised as often as may be deemed expedient. No waiver of any default under the Loan Agreement shall extend to or affect any subsequent event of default, whether of the same or different provision of the Loan Agreement, or shall impair consequent rights or remedies.

APPENDIX L

Loan Recipient/Contractor Claims and Disputes.

The Loan Recipient acknowledges and agrees that the Department is not a party, in any manner whatsoever, to any contract between the WPCRLF loan recipient and the construction contractor(s), engineer(s), attorney(s), equipment supplier(s), subcontractor(s) or any other parties of any kind whatsoever (hereinafter collectively referred to as “vendor”). The Loan Recipient also acknowledges and agrees that any benefit to vendors contracting with the Loan Recipient arising from, or associated with this contract is strictly incidental and all such vendors are not, and are not intended to be considered as third party beneficiaries under any agreement between the Department and the Loan Recipient.

Upon execution of any contract between the loan recipient and its vendors in regard to a WPCRLF funded project, the Department does not assume any authorities, duties, responsibilities, or liabilities under such a contract.

The Department does not have any authority, duty, responsibility, or liability in contract claims or dispute identification, negotiation, resolution, or any other actions regarding contract claims or disputes under the contract(s) between the loan recipient and its vendors.

No actions taken by the Department, either directly or indirectly, in regard to the WPCRLF loan funded project constitute or establish any determinations, authority, duty, responsibility, or liability under the contract(s) between the loan recipient and any other party. The Loan Recipient agrees and warrants that it shall include language, approved by the Department, in its contracts with its vendors requiring the Loan Recipient and its vendors to acknowledge and agree that the Department is not a party, in any way whatsoever, to the contract between the Loan Recipient and its vendors. Such language shall require the Loan Recipient and vendors to acknowledge and agree that the role of the Department is strictly that of a lender, that the vendors are not, and are not intended to be, considered a third party beneficiary under any agreement between the Department and the Loan Recipient. Additionally, such language shall also require the Loan Recipient and its vendors to acknowledge and agree that any action taken by the Department in its role as administrator for the revolving loan programs, or in its separate and distinct role as regulator shall not in any way change or alter its position as that of lender.

The loan recipient and its vendors must resolve all claims and disputes by negotiation, arbitration, litigation, or other means as provided in the contract documents and state law, prior to submission of any related change order or contract amendment to the Department for review and approval, in order to obtain a WPCRLF loan allowability determination.

APPENDIX M

Definitions

The following words and terms, when used in this regulation, will have the following meanings, unless the context clearly indicates otherwise:

- (1) Act – The Federal Water Pollution Control Act, as amended, 33 USC 1251, et. seq., including any amendments.
- (2) Allowable Costs – Those project costs that are eligible, reasonable, necessary, allocable to the project, within the established project scope and budget, in conformance with the WPCRLF regulations, and determined allowable by the Department.
- (3) Authorized Representative – The signatory agent of the applicant authorized and directed by the applicant’s governing body to make application for assistance and to sign documents on behalf of the applicant, as required to undertake and complete the project. The signatory agent must be a member or an employee of the applicant’s governing body and may not be under a separate contract with the applicant at any time during the execution of the project.
- (4) Binding Commitment – A WPCRLF loan offer, as described in these regulations.
- (5) Budget Period – The time period beginning on the date established in the loan agreement and ending on the date 30 days after the Department’s final construction observation, during which allowable costs may be incurred.
- (6) Change Order – The documents, including supporting documentation, executed by the loan recipient and the construction contractor, upon recommendation of the engineer if required by the contract documents, authorizing a change, alteration, or variance in the plans, specifications, and contract documents, including, but not limited to, additions or deletions of work to be performed pursuant to the contract or a change in costs or time for work performed after execution of the contract.
- (7) Collector Sewer – The common lateral sewers, within a publicly owned treatment system, which are primarily installed to receive wastewater directly from facilities which convey wastewater from individual systems or from private property.
- (8) Commission – The Mississippi Commission on Environmental Quality or its successors.
- (9) Consolidation Project – The acquisition of an existing entity or its treatment works by another or the merger of two entities.
- (10) Construction – Any one or more of the following: erection, building, acquisition, alteration, repair, improvement or extension of treatment works.

- (11) Department – The Mississippi Department of Environmental Quality, and its designated representatives or successors.
- (12) Eligible Applicant – Any county, municipality, municipal public utility, authority, district, political subdivision or other governmental unit created under state law which has authority to dispose of domestic wastewater, industrial wastewater, wastewater sludges resulting from the treatment of such wastewater, stormwater, or nonpoint sources of pollution, has the authority under State law to receive WPCRLF loan assistance, has the ability to comply with these regulations and the requirements of the WPCRLF loan agreement, and which is not in arrears in repayments to the Water Pollution Control Revolving Fund, the Water Pollution Control Emergency Loan Fund, the Water Pollution Abatement Loan Fund or any other loan.
- (13) Eligible Costs – Costs in which WPCRLF loan participation is authorized pursuant to applicable statute.
- (14) Engineer – Unless otherwise indicated, the engineer, or engineering firm, registered by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors, retained or employed by the loan recipient to provide professional engineering services during the planning, design and/or construction of the project.
- (15) Executive Director – The executive director of the Mississippi Department of Environmental Quality or his designee.
- (16) Financial Capability Summary – A financial analysis of a water pollution control system to determine whether the system has the capability to reliably meet the financial obligations on a long term basis.
- (17) Force Account – Involves the use of the loan recipient's employees, equipment for construction, construction related activities and/or architectural and engineering services.
- (18) Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.
- (19) Inflow – Water other than wastewater that enters a sewer system (including sewer service connections) as a result of rainfall or rainfall induced soil moisture from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.
- (20) Interceptor Sewer – A sewer which is designed for one or more of the following purposes:

- (a) To intercept wastewater from a final point in an existing or proposed collector sewer and convey such wastes directly to a treatment facility or another interceptor or pump station.
 - (b) To replace an existing wastewater treatment facility and transport the wastes to an adjoining collector sewer or interceptor sewer for conveyance to a treatment plant.
 - (c) To transport wastewater, together with quantities of infiltration and inflow that are not admitted intentionally, from one or more municipal collector sewers to another municipality or to a regional facility for treatment.
 - (d) To intercept an existing discharge of raw or inadequately treated wastewater for transport directly to another interceptor, pump station or to a treatment plant.
- (21) Interlocal Agreement – An agreement or contract between the loan applicant/recipient and other entities relating to use, enforcement or finances of the project or treatment works, which may be necessary to ensure completion and operation, and maintenance of a useful project.
 - (22) Loan Agreement – A legal and binding agreement between the Department and the loan recipient through which the Department provides WPCRLF assistance for eligible and allowable costs and the recipient agrees to repay any administrative fees to the Department and the principal sum and interest to the WPCRLF over a period and at an interest rate established in the loan agreement.
 - (23) Loan Applicant – An eligible applicant that applies or intends to apply for financial assistance from the WPCRLF program
 - (24) Loan Recipient – An eligible applicant that executes a WPCRLF loan agreement.
 - (25) Overflows and Bypasses – Polluted water, such as sewage, which overflows or bypasses any portion of the treatment works prior to complete and final treatment and discharge in accordance with the permit.
 - (26) Project – The scope of work for which financial assistance is provided under the WPCRLF loan agreement.
 - (27) Project Completion – The date of the final construction observation as performed by the Department for the purpose of a loan allowability determination.
 - (28) Repayment – Administrative fees, principal and interest repayments on WPCRLF loans as established in the loan agreement.
 - (29) Service Line – A conduit intended to carry wastewater, together with quantities of infiltration and inflow that are not admitted intentionally, from residences, public buildings and businesses to a collector sewer.

- (30) Title Counsel or Legal Counsel – The attorney(s) of record, legally practicing, who provide(s) legal advice and certifications relating to the project for the loan applicant/recipient.
- (31) Treatment Works – Any devices and systems which are used in the storage, treatment, transportation, recycling, and reclamation of domestic, industrial, and/or commercial wastewater, including intercepting sewers, outfall sewers, sewage collection systems, service lines, pumping, power, and other equipment and their appurtenances; extensions, improvements, repair, additions, and alterations thereof; and any works, including the land that will be an integral part of, or used in connection with, the treatment process (including land used for the storage of treated water in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from such treatment; and any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of domestic, industrial, and/or commercial wastewater, stormwater runoff, wastewater in combined stormwater and sanitary sewer systems, and nonpoint source pollution.
- (32) User Charge Ordinance – A legally enforceable ordinance, regulation or corporate resolution enacted by the loan recipient which includes, at least by reference, the user charge system, and establishes user charge rates, to generate adequate revenues to cover all costs of the treatment works, as required by the user charge system.
- (33) User Charge System – The system by which the loan recipient charges users of the treatment works rates that produce adequate revenues required for operation, maintenance, replacement of equipment, retirement of existing debt, and repayment of the WPCRLF loan for the project.
- (34) Value Engineering – A specialized cost control technique which uses a systematic and creative approach to identify and focus on high costs in a project in order to arrive at a cost saving without sacrificing the purpose, reliability or efficiency of the project.
- (35) WPALP – The Water Pollution Abatement Loan Program
- (36) WPCELF – The Water Pollution Control Emergency Loan Fund.
- (37) WPCRLF – The Water Pollution Control Revolving Loan Fund.