Administrative Procedures Act Rules

Title 11: Mississippi Department of Environmental Quality

Part 7 Surface Water and Groundwater Use and Protection, Licensing of Water Well Contractors and Dam Safety Regulations

Part 7, Chapter 1: - Mississippi Commission Environmental Quality Surface Water Groundwater Use and Protection Regulations

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Rule 1.1 Definitions.

The words and phrases used in this regulation shall have the meanings set forth in this section.

A. Annular Space — the space between the borehole wall and the well casing or screen, or the space between a casing pipe and a liner pipe or between two strings of casing.

B. Applicant — any person who submits an application to obtain a permit to divert, store, or withdraw waters of the state.

C. Aquifer — a geologic formation, hydraulically connected group of formations, or part of a formation that can yield water to a well or spring

(1) Confined Aquifer (Commonly referred to as artesian aquifers) – a permeable geologic layer or zone saturated with groundwater isolated from the atmosphere by impermeable confining layers. The groundwater in confined aquifers is subjected to pressures higher than atmospheric pressure so that water in a well penetrating the aquifer will rise to some

level above the actual top of the aquifer.

(2) Unconfined Aquifer (Commonly referred to as water table aquifers) – a permeable geologic layer or zone saturated with groundwater at atmospheric pressure. These aquifers are generally not overlain by impermeable confining layers and may be vulnerable to contamination from surface activities or events that discharge pollutants on the ground.

D. Artesian —groundwater under sufficient hydrostatic pressure to rise above the aquifer containing it.

E. Beneficial use — the application of water, excluding waste of water, to a purpose that produces economic or other tangible or intangible benefits to the state and its citizens. Such uses include, but are not limited to, diversions or withdrawals for public, industrial, or agricultural use.

F. Commission – the Mississippi Commission on Environmental Quality, or its designee.

G. Conjunctive use — the use of two (2) or more sources of water to provide the total supply of water needed for a proposed use.

H. Days — calendar days, unless specifically indicated otherwise in the body of this regulation.

I. Decommissioning — the complete and permanent sealing of a well bore to prevent contamination of the aquifer.

J. Diversion — the act of bringing surface water under control by means of a well, pump, dam or other man-made device for delivery and distribution for a proposed beneficial use.

K. Domestic use — the use of water for ordinary household purposes, the watering of noncommercial farm livestock, poultry, and domestic animals, and the irrigation of home gardens and lawns.

L. Established minimum flow — "Established minimum flow" means the minimum flow for a given stream at a given point thereon as determined and established by the commission when reasonably required for the purposes of this chapter. "Minimum flow" is the average streamflow rate over seven (7) consecutive days that may be expected to be reached as an annual minimum no more frequently than one (1) year in ten (10) years (7Q10), or any other streamflow rate that the commission may determine and establish using generally accepted scientific methodologies considering biological, hydrological and hydraulic factors.

M. Established average minimum lake level — "Established average minimum lake levels" means the average minimum lake levels for a given lake as determined and established by the commission when reasonably required for the purposes of this regulation. The "average minimum lake level" is that level which shall not be expected to be reached as

an average annual minimum no more frequently than one (1) year in ten (10) years, or such other minimum lake level that the commission may determine and establish using generally accepted scientific methodologies considering biological, hydrological and hydraulic factors.

N. Filter pack — smooth, uniform, clean sand or gravel placed in the annular space between the borehole wall and well screen to prevent sediments from entering the screen.

O. Fresh water — water having a Total Dissolved Solids (TDS) concentration of less than 1,000 parts per million (ppm).

P. Geotechnical boring — a hole constructed for the purpose of sampling, measuring, or testing for scientific, engineering, geological or regulatory purposes.

Q. Groundwater — water occurring beneath the surface of the ground.

R. Grout — a fluid mixture of cement and water, with additives such as sand, bentonite, or hydrated lime, or a mixture of bentonite and water, capable of producing a water-tight seal, that can be forced through a pipe or placed in an annular space, as required for sealing a well or an annular space to protect against intrusion of contamination.

S. Halliburton Method – a method of grouting casing whereby slurry is forced down and out the bottom of the casing into the annular space between the borehole wall and the casing. The grouting is continued until slurry returns are obtained at the ground surface.

T. Impoundment — a man-made dammed, leveed, or diked area designed to store liquids above water levels that would occur under natural conditions.

U. Landowner — the person, or persons, holding legal title to the surface of the land upon which a withdrawal or diversion of water is located.

V. MDEQ – the Mississippi Department of Environmental Quality

W. Mining of an Aquifer – the withdrawal of groundwater from hydrologically connected water-bearing formations at rates determined by the Commission to jeopardize the longterm viability of the aquifer as a source of water for existing and projected beneficial beneficial uses.

X. Municipal use — the use of water by a municipal government and the inhabitants thereof, primarily to promote the life, safety, health, comfort and business pursuits of the inhabitants. It does not include the irrigation of crops within the corporate boundaries.

Y. OLWR – the Office of Land and Water Resources of MDEQ.

Z. Permitted use and "Permittee"

(1) The use of a specific amount of water at a specific time and at a specific place,

authorized and allotted by the board for a designated beneficial purpose within the specific limits as to quantity, time, place and rate of diversion and withdrawal; or

(2) The right to the use of water as specified in the permit, subject to the provisions of Mississippi Code Annotated Section 51-3-5, including the construction of waterworks or other related facilities.

(3) "Permittee" means the person who obtains a permit from the board authorizing him to take possession by diversion or otherwise and to use and apply an allotted quantity of water for a designated beneficial use and who makes actual use of the water for such purpose, or his successor.

AA. Person — the state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and including 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.

BB. Plugging — see 'Decommissioning'.

CC. Potable Water — water that is suitable for human consumption and meets all primary drinking water standards (Maximum Contaminant Levels) set by the United States Environmental Protection Agency (EPA).

DD. Potential Sources of Contamination – sites or facilities that use, store, and/or dispose of substances (on site) that, due to their quantity, toxicity, and/or mobility, could impact the water quality of aquifers used for potable water supply. Examples of such sources include, but are not limited to, failing or inadequate individual sewage treatment and disposal systems, tanks used for bulk storage of petroleum products, Class V injection wells, container and drum storage sites, etc.

EE. Preliminary Assessment Report – a pre-construction assessment of the susceptibility of a public water system well or surface water intake to becoming contaminated by potential sources of contamination within a delineated protection area.

FF. Protection Area—an area delineated around a public water system wellhead that defines the groundwater capture zone of the well, or an area of concern delineated for a public surface water system intake. It corresponds to the area where efforts should be focused to identify potential sources of contamination that could impact the quality of the groundwater or surface water supply.

GG. Public Water System –a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other conveyances if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. **Note: This duplicates a Mississippi State Department of Health definition. It is included in this regulation to serve as a reminder that wells exempted from regulation by MDEQ because the**

surface casing diameter is less than six (6) inches, may still be regulated by the Mississippi State Department of Health if they are part of a Public Water System.

HH. Riparian — pertaining to the bank of a natural watercourse or lake.

II. Surface casing — that string of casing in any water well having the greatest outside diameter, regardless of whether the top of the casing is at or below ground level.

JJ. Surface water — water occurring on the surface of the ground

KK. Transmissive unit — a saturated permeable geologic unit that can transmit significant quantities of water under ordinary hydraulic gradients.

LL. Tremie pipe — a device, usually a small-diameter pipe, that carries grout or other material to the bottom of a borehole or casing and that allows pressure grouting from the bottom up without introduction of air pockets.

MM. Watercourse — any natural lake, river, creek, cut, or other natural body of fresh water or channel having definite banks and bed with visible evidence of the flow or occurrence of water, except such lakes without outlet to which only one (1) landowner is riparian.

NN. Water table or unconfined aquifer — the upper limit of the portion of the ground wholly saturated with water at atmospheric pressure.

OO. Waters of the state — all waters within the jurisdiction of this state, including all streams, lakes, ponds, impounding reservoirs, marshes, watercourses, waterways, wells, springs, and all other bodies or accumulations of water, surface and underground, natural or artificial, situated wholly or partly within or bordering the state; except lakes, ponds or other surface waters which are wholly landlocked and privately owned, and which are not regulated as waters of the United States under Section 404 of the Clean Water Act.

PP. Well or "water well" — a hole that is drilled, driven, bored, excavated, or otherwise penetrated into the ground to access, evaluate and/or withdraw ground water. For purposes of this regulation, this definition does not pertain to wells constructed for the purpose of disposal of fluids or other materials.

(1) Abandoned Well — a well that has not been used within the preceding twelve month period, or one that has had the pump disconnected and/or removed for reasons other than maintenance, repair, or replacement.

(2) Dewatering Well — a well used for temporary removal of surface water or groundwater to facilitate construction or mining operations, or for permanent protection of a structure or activity from the effects of surface water or groundwater.

(3) Monitoring Well — a well used to obtain data on the quality of water in an aquifer system or at specified depths and locations related to a potential source of

pollutant.

(4) Observation Well – a well used primarily for measuring the water level in an aquifer.

(5) Recovery Well — a well constructed for the purpose of recovering undesirable groundwater for treatment or removal of contaminants.

(6) Relief Well — a well constructed to provide pressure relief from an artesian aquifer or from excessive head differentials in water table aquifers.

(7) Replacement Well— a well drilled to replace an existing well that has become unusable, provided the new well meets the requirements set forth in these regulations.

(8) Standby Well – a well that can be placed in operation to withdraw water but is only used when water is temporarily unavailable from the primary source or sources because of mechanical failure, maintenance, or power failure.

(9) Test Well – a well drilled to explore for groundwater for a water supply well.

(10) Underground Discharge Well -- a well in which the casing terminates at a discharge head located below the frost line.

QQ. Well Completion — term used collectively to refer to both the drilling and developing phases of well construction. For the purpose of reporting requirements established in this regulation, a distinction is made between completion of drilling and completion of well development:

(1) Completion of drilling – the date that drilling is completed and the drill rig is no longer required at the site.

(2) Completion of well development – the date that the well is fully functional and ready to provide water for its designated beneficial use, including having met any applicable water testing requirements.

RR. Withdrawal – the act of bringing groundwater under control by means of a well, pump, or other man-made device for delivery and distribution for a proposed beneficial use.

Source: Miss. Code. Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq*.

Rule 1.2 Permitting

A. Scope and Applicability - All water, whether occurring on the surface of the ground or underneath the surface of the ground, has been declared by statute to be among the basic resources of this state and subject to this regulation governing control, development, and use of water for all beneficial purposes. No person who is not specifically exempted by

statute and this regulation shall initiate actions to use water without having first obtained a permit as provided herein and without having otherwise complied with the provisions of this regulation and any applicable permit conditions. Measures set forth in this regulation have been promulgated by the commission to effectively and efficiently conserve, manage, protect and utilize the water resources of Mississippi. In order to protect and preserve the groundwater resources of the state, the Commission may declare that mining of an aquifer is occurring in any area of the state where withdrawal of groundwater is adversely affecting the quality or quantity of water available for beneficial use; is adversely affecting other natural resources of the state that are either hydrologically interconnected with the aquifer, or are dependent upon discharges from the aquifer as a source of water; is posing a threat to the health, safety, or general welfare of the public by jeopardizing sustainable sources of water; or is posing a substantial threat to the long-term viability of the aquifer as a source of groundwater. The Commission may also designate and delineate "special water use areas" where water resources including surface water, groundwater, or both are inadequate to meet present or reasonably foreseeable needs. However, the lack of a specific Commission declaration, designation, or delineation of a "special water use area" will in no way diminish the authority of the Commission to issue necessary orders, or of the Permit Board to deny permits found to be contrary to the public interest, to attach conditions to issued permits as required, or to take any other action with regard to an individual permit or application for permit as set forth in other sections of this regulation. If the Permit Board takes such an action in the absence of a specific Commission declaration, designation, or delineation of a "special water use area," the Permit Board will specify the scientific or other public policy basis for its action in the minutes of the Permit Board meeting and, where applicable, within the permit document itself.

B. Designation of Special Water Use Areas - The Commission shall issue a water use warning or declare and delineate a water use caution area for any area of the state where existing water resources, including surface water, groundwater, or both, are inadequate to meet present or reasonably foreseeable needs; or if mining of an aquifer is occurring. Under normal circumstances, the Commission will not designate a water use caution area without first attempting to address a problem through the water use warning procedure. The water use warning procedure generally involves the regulated public, stakeholders, and other interested parties and organizations in a collaborative effort to formulate a plan and timetable to resolve the problem and seeks a cooperative, voluntary approach to plan implementation. However, the decision whether to issue a water use warning or, instead, to declare a water use caution area, shall be made pursuant to the criterion stated in Miss. Code Ann. Section 51-3-11(2)(a) and (3)(a) as to whether time allows the development of a solution through the water use warning process or prompt and immediate action is required to protect the resource, thus requiring the declaration and delineation of a water use caution area.

(1) Water Use Warning Area – Mississippi Department of Environmental Quality monitors water levels and water quality parameters in aquifers at regular intervals and utilizes data from stream gaging stations, water quality monitoring stations, reports of other state and federal agencies, and historic stream flow records on surface waters to assess the quality and availability of water for present and projected beneficial uses in various regions of the state. The Commission may issue

a water use warning when analysis of available scientific data identifies unacceptable trends that may lead to possible adverse long-term conditions affecting the water resources of the state. Actions that may be taken after a water use warning is issued include, but are not limited to, the following:

(a) Coordinating with the permit holders, political subdivisions, and water management districts within the area to develop a plan and implementation schedule for alleviating or correcting the conditions, if possible, or to safeguard supplies of water for highest priority uses if necessary;

(b) Sending notice to all permit holders, political subdivisions, and water management districts within the affected area. The notice will describe the conditions that required the issuance of the warning, set forth the proposed corrective measures, request assistance from all recipients in implementing the identified corrective measures, and request voluntary compliance with the proposed corrective measures from the permit holders;

(c) Reducing permitted volumes of water through either voluntary permittee agreement to implement water conservation practices and a conjunctive use plan, or modification of existing permits to mandate such action by the permittee;

(d) Establishing a monitoring network to verify effectiveness of implementation of the plan; and

(e) Requiring metering and/or reporting for all water uses within the affected area, regardless of whether the use may have been previously exempted from regulation and reporting.

(2) Water Use Caution Area - The Commission may establish, after notice and hearing, a water use caution area when it is evident from analysis of available scientific data that the actions implemented through the water use warning process will not achieve the desired results in a timely manner; or when analysis of available scientific data indicates prompt and immediate action is required to protect the water resources. Actions that may be taken after a caution area is established include, but are not limited to, the following:

(a) Developing a plan, including an implementation schedule, to alleviate or correct the conditions;

(b) Declaring a moratorium on processing new applications for groundwater withdrawal or surface water diversion permits in the caution area;

(c) Reducing permitted volumes of water through modification of existing permits and issuance of orders by the Commission to restrict water usage in the affected area; and

(d) Requiring metering and water use reporting for all wells and/or diversion points in the area.

If the Commission orders the establishment of a water use caution area, the Commission shall, within one hundred twenty (120) days following entry of the order, adopt regulations consistent with Miss. Code Ann. Title 51, Chapter 3 and commensurate with the necessary degree of control pursuant to its regulatory authority in Miss. Code Ann. Section 51-3-25.

C. Basic Requirements - No person shall initiate the drilling of a groundwater well or the placement of a surface water intake until an appropriate groundwater or surface water use permit has been issued by the Permit Board, or its designee as required by Miss. Code Ann. Sections 51-3-5 and 51-3-7. Likewise, no person shall commence construction of a surface water impoundment until an appropriate surface water permit for storage or use of water from an impoundment as required by Miss. Code Ann. Section 51-3-39 paragraph (1)(c) has been issued by the Permit Board, or its designee. This requirement does not apply to properly authorized emergency situations discussed in Rule 1.2.K-Emergency Authorizations, to exempted surface water diversions discussed in Rule 1.3.A or to exempted groundwater withdrawals discussed in Rule 1.4.A Applications for use of groundwater or surface water must meet the following requirements in order to be considered for approval by the Permit Board:

(1) The application must completely and accurately describe the purpose for the proposed use of water;

(2) Such use must not be prohibited by state or federal statutes or regulations; and

(3) The proposed source of water must be free of Commission-imposed restrictions that preclude processing of the application.

D. Content of Applications and Owner Responsibilities - The applicant shall submit a completed application to MDEQ, on forms prescribed by the Commission, for each separate withdrawal or diversion point. Where mobile pumps are proposed for use in the diversion of surface water, a separate permit will be required for each quarter-quarter section from which water is to be diverted. For irregularly shaped sections, MDEQ will determine on a case-by-case basis the number of permits required.

Applications shall be completed using maximum volume of water required, estimated dates for initial use of the water, and estimated values for withdrawal or diversion rates. MDEQ may request additional information from the landowner/applicant, if the submitted form lacks sufficient information for processing. All permit applications, including maps and aerial photographs shall become the property of MDEQ.

(1) Maps — Applications shall be accompanied by a suitable map.

(a) Submitted maps may be photocopies of United States Geological Survey quadrangle maps, photocopies of county maps, aerial photos, or other types of maps, provided sufficient detail is included. Details commonly

required include section lines, townships and ranges, and (if nearby), highways and county roads, large bodies of water such as rivers, streams, lakes, etc., utility rights-of-way, and communities. The map must be of suitable detail for locating the well / diversion point and any irrigated lands or ponds on a USGS quadrangle map.

(b) Maps must show location of well/diversion point applied for and, if applicable, all land being irrigated, in use as fish ponds, or flooded for wildlife habitat. One map may be used to indicate locations of several wells/diversion points and several tracts of land. However, the tracts of land must be designated on the map to indicate which well/diversion point supplies water to each tract. If two or more wells/diversion points provide water to the same tract of land, the overlapping area must be indicated, or an imaginary boundary line must be drawn to divide the tract into areas served by each well/diversion point.

(2) Fees – A fee of ten dollars ($10.00) must accompany each permit application. A separate application is required for each new well or diversion point. If more than one application is submitted at one time, a single check, money order, or electronic payment may be sent for the total amount of the application fees. **DO NOT SEND CASH**!

(3) Preliminary Assessment Report – For proposed regulated wells or surface water intakes that will be part of a public water supply system, MDEQ will be responsible for preparation of a Preliminary Assessment Report (PAR) addressing the suitability of the proposed well site or diversion point to supply a source of safe drinking water. The assessment will consider the inherent vulnerability of the intended source water aquifer or surface water body as well as the identification and proximity of potential sources of contamination, including any improperly abandoned (unplugged) wells, to the proposed site. Final approval of a groundwater withdrawal permit or surface water diversion permit by the Permit Board, or its designee, will be based upon the findings of the preliminary assessment as to the suitability of the site, without exposure to higher than normal risk, for a public water system well.

(4) Publication of Intent — When MDEQ accepts the completed application for a permit, MDEQ will furnish the landowner/applicant a prepared notice of intent to use waters of the state along with instructions for publishing the notice. The landowner/applicant shall publish the notice of intent one time in a newspaper of general circulation in the county in which the proposed well/diversion point will be located. The landowner/applicant must pay the expense of the publication and must direct the newspaper to forward a proof of publication to MDEQ.

E. Issuance or Denial - MDEQ may hold a public hearing regarding any application. The

application and results of the public hearing will then be presented to the Permit Board, or its designee. The Permit Board will either issue or deny the permit, and that decision will be effective as of the date the action is taken.

The Permit Board may deny a permit or issue a permit for less than the requested withdrawal rate or volume if, in the opinion of the Permit Board, the use is not for a beneficial purpose; or such use would adversely interfere with existing permitted uses; or such use would be in conflict with the public interest. Any permit issued may contain such conditions (Rule 1.2.J) as the Board deems necessary to assist MDEQ in management of the water resources of the state. If action authority for a permit application has been delegated by the Permit Board to MDEQ Staff, the permit action may be taken according to Permit Board regulations regarding delegation of permit action authority.

The Permit Board may issue a permit for a beneficial use that constitutes mining of an aquifer only if it finds that such use is essential to the safety of human life and property; or the landowner/applicant:

(1) Provides written assurance to the Permit Board that the requested use will be temporary,

(2) Submits a viable plan and acceptable time schedule for acquiring the required water from another source which will not result in mining of any other aquifer; and

(3) Submits an annual report, net worth statement, or other documentation, as may be required by the Permit Board, to demonstrate financial ability to develop the proposed alternate water supply. Once a permit is issued, MDEQ will provide the permittee a copy of the permit document, which shall constitute authorization to begin the use of the waters of the state.

F. Duration of Permit.

(1) Construction Period – For public water supply wells, construction must be initiated within two (2) years after the water use permit is issued or the permit will be null and void without further action by the Permit Board. For all other water uses, except as stated below, if well/diversion system construction has not begun within one year after a permit is issued by the Permit Board, the permit will be null and void without further action by the Permit Board. In such cases, the landowner/applicant will have to reapply and follow the same procedures required for the original application. The Permit Board may grant variances from this requirement, if the landowner/applicant can demonstrate to the Permit Board that mitigating circumstances dictate the need for delaying the onset of construction beyond the one year limit.

(2) Expiration –Water use permits normally will be issued for a period of ten (10) years. Longer terms may be permitted for certain public entities in order to assure

reasonable amortization of capital investment in water-related equipment. Such entities are limited to municipalities, counties or other governmental subdivisions, public utilities, or publicly regulated utilities. Shorter terms may be permitted when the Permit Board determines that such terms are necessary to protect the public interest.

(3) Reissuance –

(a) Notification – Six months prior to the expiration date of the permit, MDEQ will send, by certified mail to the address of record in the permit file, a notice to the landowner/permittee informing him of the requirement to re-apply in order to maintain the right to use water under the permit. An application form and instructions for submitting the application will be included with the notice. However, failure by MDEQ to provide such notice shall not relieve the landowner/permittee from the legal.

(b) Application – When MDEQ accepts a completed application for reissuance, the applicant must publish a notice of intent to continue the permitted use and assure that the publisher provides proof of publication to the MDEQ. The Permit Board will then reissue the permit, unless the Permit Board determines such continued use is contrary to the public interest. The Permit Board may change the conditions of the permit at reissuance upon finding that such a change would be in the public interest.

(c) Termination – If the permittee fails to submit an application for reissuance prior to the expiration of the permit, the right to use the water described in the permit shall automatically terminate upon the expiration date. If processing of a completed application received prior to the expiration date extends beyond the expiration date, the permit will remain in effect until a final decision on reissuance is made by the Permit Board.

G. Permit Modification –

(1) Actions Requiring Modification – A permit may be modified for any of the following reasons:

(a) Any change in the beneficial use of, and/or the volume of, water withdrawn from a well or diverted from a surface water body.

(b) Any change in location of a surface water diversion point.

(c) Any change in permit parameters requested by the landowner/permittee such as change of ownership, change of permittee, or change of mailing address.

(d) Any change in permit conditions.

(e) Any substantive errors in a permit that must be corrected.

(f) Legislative action or judicial decision.

(2) Procedures

(a) The landowner/permittee must provide MDEQ a written request for modification for proposed changes as identified in Rule 1.2.G.1.a. and b. above, or written notification of any proposed change in permit parameters as described in Rule 1.2.G.1.c. above.

(b) Modifications that result from changes in administrative information only, such as names and mailing addresses; or modifications that are required only to correct administrative errors will be presented to the Permit Board, or its designee, for immediate final action.

(c) The procedure for processing a requested modification for proposed changes in beneficial use, withdrawal volume, or location of diversion point will depend upon the nature and significance of the change:

(1) A requested modification that involves significant deviations from the conditions established under the original permit may be deemed by the Permit Board to constitute a new activity. If so, the request will be returned to the requestor with instructions to submit a new application.

(2) A requested modification may be deemed by the Permit Board to require advertisement of a notice of intent to modify the permit. If so, the requestor will be informed of the decision and provided a prepared notice for publication. The requestor shall publish the notice of intent one time in a newspaper of general circulation in the county in which the permitted well/diversion point is located. The landowner/applicant must pay the expense of the publication and must direct the newspaper to forward a proof of publication to MDEQ.

(3) A requested modification that proposes only minor changes in volume of withdrawal/diversion or location of a diversion point may be processed by the Permit Board, or its designee, without further action being required on the part of the requestor

(d) MDEQ may hold a public hearing regarding any request for modification. The request and results of the public hearing will then be presented to the Permit Board. The Permit Board will either approve the modification or deny the request, and that decision will be effective as of the date the action is taken.

H. Revocation. - The Board will normally give the permittee at least sixty (60) days written notice prior to taking any final action to revoke a permit unilaterally, unless such delay is deemed to be contrary to the public interest. Conditions which may lead to the revocation of a permit include, but are not limited to, the following:

(1) Noncompliance with any condition in the permit.

(2) Failure by the landowner/applicant to disclose all relevant facts during the application and permitting process, or misrepresentation of any relevant facts by the landowner/applicant/permittee, at any time.

(3) A determination by the Permit Board that the permit holder is using the water resources of the state in a manner deemed to be contrary to the public interest.

I. Hearings and Appeals - Any person aggrieved by any initial action of the Permit Board to issue, deny, transfer, modify or revoke a permit may request an evidentiary hearing before the Permit Board regarding the decision. Procedures for hearings and further appeals of Permit Board decisions are set forth in Mississippi Code Annotated Section 49-17-29.

J. Special Conditions. The Permit Board may establish conditions on permits to require:

(1) Compliance schedules for the accomplishment of certain tasks deemed necessary and appropriate by the Permit Board.

(2) Compliance schedules for the cessation of use of groundwater for once-through, non-contact cooling purposes, which is subsequently discharged to the environment. NOTE: Facilities that are authorized use of less than 20,000 gallons per day (gpd), or such other small volume as may be approved by the Permit Board, for once-through non-contact cooling will be considered on a case-by-case basis and may not be required to cease such usage.

(3) Installation of flow metering or measuring devices.

(4) Installation and mandatory operation of flow restriction devices on flowing artesian wells.

(5) Future reductions in the volume of water withdrawn or diverted, provided the schedule for such reductions is explicitly outlined in a compliance schedule.

(6) Reports as necessary to provide data on the volume of water withdrawn or diverted.

(7) Any other conditions the Board determines to be necessary to protect the public interest.

K. Emergency Authorization - A written authorization for emergency use of water from a well or a surface water diversion point may be granted by the Permit Board, or its designee. An emergency authorization may be issued only when the Permit Board, or its designee, determines groundwater or surface water must be used to safeguard life, property, public safety, or other compelling public interests, and the exigency precludes waiting for the time required to process a normal permit application.

Emergency authorizations will remain in effect only for the time required to process a permit application for the use authorized under emergency conditions, and the written authorization will include a time limit for submittal of the required application. If a complete application is not received by MDEQ within the time limit specified in the emergency authorization, the authorization will automatically stand rescinded.

The emergency authorization does not guarantee that the Permit Board will ultimately issue a permit for such authorized use. If the Permit Board denies the permit, the emergency authorization is rescinded and the previously authorized water usage shall cease unless and until the decision of the Board is reversed or modified on appeal.

L. General Permits - The Permit Board may issue General Permits, following appropriate public notice and comment period. The Public Notice indicating the Permit Board's intent to issue such a General Permit will describe the nature of activities to be covered under the permit, set forth any required notification procedures, and establish documentation requirements for individual projects that may be pursued under authority of the General Permit.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

*Rule 1.3 Surface Water Diversion*s. All surface water diversions must meet the permitting requirements set forth in Rule 1.2, unless specifically exempted below.

A. Exemptions – Surface water diversions meeting the following conditions shall not be subject to the permitting requirements of this chapter:

(1) Diversions when the water is to be used for domestic single-residence purposes.

(2) Diversions from an existing impoundment not located on a continuous, free flowing watercourse. However, for proposed surface water impoundments, the person intending to acquire the right to store or use water from a reservoir formed by a dam shall obtain a permit for storage or use of water from the impoundment as required by Miss. Code Ann. Section 51-3-39 paragraph (1)(c), prior to commencement of construction of the dam.

B. Limiting Conditions for Permit Issuance – The intended use of state waters must be beneficial and consistent with the public interest. Surface water conditions which may limit or affect permit usage may include, but are not limited to, the following:

(1) Established Minimum Flow—Generally, a permittee may not divert a volume of surface water that will cause the watercourse to fall below its established minimum flow. If a watercourse falls below its established minimum flow, the permit holders affected that are consumptive users will be informed that their pumping must be stopped or modified until further notice. Affected permit holders that are municipalities or are non-consumptive users (users that return to the stream substantially the same amount of water that the user diverts, at substantially the same location) have the option of requesting a variance from the minimum flow requirements. The request must be made, in writing, to the Permit Board.

(a) Municipal Users – The Permit Board may authorize surface water diversions by municipal users resulting in less than the established minimum flow, provided:

(1) The landowner/applicant presents a study showing the potential effects of the proposed use on the watercourse; and

(2) The Permit Board determines that such uses will not violate the state's water quality standards (including in-stream uses) or otherwise conflict with the public interest.

(b) Industrial Users – The Permit Board may authorize surface water diversions by industrial users when flows are at or less than the established minimum flow, provided the permittee:

(1) Returns water to the stream in substantially the same amount as that removed and the quality of the return water meets the requirements of the State's National Pollutant Discharge Elimination System (NPDES) Permit Program; and neither the diversion nor the return of water will cause or contribute to a violation of the state's water quality standards; and

(2) Returns water in close enough proximity to the diversion point to avoid substantial detriment to water use rights of affected property owners or to the detriment of the public interest. The Permit Board may require the permittee to conduct such studies or to provide such information as it deems necessary to determine the potential effect of the proposed use on the affected ecosystem and on the public interest.

(c) Other Users – The Permit Board may authorize surface water diversions by other users when flows are at or less than the established minimum flow, provided the permittee:

(1) Provides written assurance that water will be returned to the stream in substantially the same amount as that removed and the quality of the return water will meet requirements of the State's National Pollutant Discharge Elimination System (NPDES) Permit Program; and neither the diversion nor the return of water will cause or contribute to a violation of the state's water quality standards; and

(2) Places metering devices on both the intake and discharge devices to measure flow rates of water; and

(3) Reports to MDEQ, at time intervals to be established by the Permit Board, the volumes of water withdrawn and the volumes and water quality analyses of water discharged.

(2) Established Average Minimum Lake Level – The Permit Board may authorize any permittee to use water from a lake or reservoir that falls within the Permit Board's jurisdiction only to the extent that the water level remains above the average minimum lake level, as established by the Commission. The Permit Board, upon affording a hearing to interested parties, may authorize use of such water below the established average minimum level provided the request for such authorization is accompanied by a study which details potential effects of the proposed use on the affected ecosystem and the public interest. The Permit Board may require such additional studies or other information as it deems necessary to protect the public interest.

(3) Pollution Control Regulations – The Permit Board will not authorize any surface water use that will cause a violation of water quality standards as set by the Commission through regulation.

(4) Navigability – The Permit Board will not authorize any surface water use that will impair the navigability of any watercourse identified as a "navigable waterway" under state or federal statute.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 1.4 Groundwater Withdrawals. All groundwater withdrawals must meet the permitting requirements set forth in Rule 1.2, unless specifically exempted below.

A. Exemptions – Wells for the purpose of groundwater withdrawal meeting the following conditions shall not be subject to the permitting requirements of this regulation:

(1) Wells used for domestic purposes and providing potable water to only one (1) household; or

(2) Wells with a surface casing diameter less than six inches, except as regulations govern prohibited uses specified in Rule 1.4.D and reporting requirements specified

in Rule 1.4.E.

(3) Relief wells installed to protect the integrity of a structure, such as a dam or levee.

Note: The fact that a well may be exempt under this regulation shall not relieve the owner of responsibility for complying with other applicable state or federal regulations ; e.g., wells, regardless of size, that are part of a Public Water System must comply with Mississippi State Department of Health Regulations.

B. Prioritization of Beneficial Uses – In areas where conflicts exist between competing interests or demands for surface water or groundwater supplies, or where there is a potential for such conflicts to arise in the future, the beneficial uses identified below will be given priority in permitting decisions, consistent with the provisions of Miss. Code Ann. Section 51-3-7, in the order listed:

(1) Public Supply [including municipal supplies, rural water systems, private water systems, private wells, and institutional uses (such as schools, churches, and military bases)] – Water permits for other beneficial uses may be denied or modified to insure that present and future public supply needs can be met.

(2) Industrial/Commercial (Including Agricultural and Commercial Livestock Uses) – Beneficial uses of water falling in this category will have equal standing in permit decisions with all other beneficial uses included in this category. Water use permits that are in place will not be modified to satisfy new or increased demands by other users who fall into this same category.

(a) Agricultural (including crop irrigation, fish culture, and similar uses.) – The applicant may be required to explore conjunctive use of surface water as an option and demonstrate efficient use of groundwater through implementation of practicable water conservation measures.

(b) Industrial (including water for all processes involved in the operation of an industrial plant or facility.) – The applicant may be required to explore conjunctive use options. Requests for industrial use must include a description of water quality needs as well as of water quantity needs. For requests without rigid water quality requirements, the landowner/applicant may be required to investigate alternative supplies (such as surface water, aquifers with poorer quality water, or treated effluent from wastewater treatment plants). Industrial users may be required to use the lowest quality water available that will meet quantity and quality requirements for the intended use.

(c) Livestock (including water for commercial cattle, hogs, and other animal operations.) – The applicant may be required to explore conjunctive use options.

(d) Commercial (including hotels, restaurants, water bottling companies,

campgrounds, and casinos.) – The applicant may be required to explore conjunctive use options.

(3) Enhancement of Wildlife Habitat and Other Recreational Uses (including water used to enhance an area for wildlife and/or waterfowl management; water used for irrigation of vegetation other than commercial crops; and other non-essential uses for leisure activities.) – Aquifers that provide the principal source of public supply in a region will generally not be considered acceptable sources of water for beneficial uses that fall into this category. Water use permits that are in place in this category of uses may be modified or revoked if necessary to satisfy higher priority demands.

(4) Other Uses – Uses not falling into one of the above categories will be evaluated on a case-by-case basis and permitted, if the use is not otherwise prohibited by this regulation and water is available.

(5) Fire Protection – While considered a beneficial use of water, fire protection is not given a priority ranking. Since fire protection water is used infrequently and only for a short duration, permits for this use will be allowed in any area where water is available.

C. Well Spacing –

(1) When deemed appropriate, the Permit Board may require the spacing of new wells or replacement wells in accordance with the following guidelines to minimize interference issues between wells developed in confined aquifers. The well spacing distances in Table 1 are a function of the transmissivity (T) of an aquifer at a given site and the anticipated discharge or pumping rate (Q) of a proposed well, where the calculated drawdown in the well is limited to fifteen (15) feet of decline over a ten (10) year period of pumping and will be applied as follows, when the Permit Board determines such spacing is needed:

Table 1. Minimum acceptable spacing distances (r) for wells pumping at constant discharges (Q) for a 10-year timeframe with various transmissivity (T) ranges.

Transmissivity (T) ft^2/day	** **Discharge Rates (Q) in mgd** / Pumping Rates in gpm						
	0.144 / 100	**0.36** / 250	**0.72** / 500	**1.08** / 750	**1.44** / 1000	**1.80** / 1250	**2.16** / 1500
<1000	2,100 ft	*40,000 ft	*112,000 ft	*162,100 ft	*198,500 ft	*229,200 ft	*250,500 ft
1000—3000	----	1,400 ft	*26,500 ft	*69,400 ft	*116,500 ft	*158,000 ft	*194,100 ft
3000—5000	----	----	4,700 ft	*24,600 ft	*55,400 ft	*91,600 ft	*126,700 ft
5000—7500	----	----	500 ft	5,800 ft	*19,800 ft	*41,800 ft	*67,800 ft
7500--10,000	----	----	50 ft	1,300 ft	6,700 ft	*17,900 ft	*34,800 ft
10,000—12,500	----	----	----	300 ft	2,200 ft	7,500 ft	*17,100 ft
12,500—15,000	----	----	----	60 ft	700 ft	3,100 ft	8,200 ft
15,000—17,500	----	----	----	----	230 ft	1,300 ft	3,900 ft
17,500—20,000	----	----	----	----	70 ft	500 ft	1,900 ft
>20,000	----	----	----	----	----	200 ft	900 ft

--- Signifies no spacing limitations (r < 50 feet)

* Scenarios that result in distances (r) greater than 10,000 feet are indications of inadequate aquifer transmissivity for the intended pumpage.

** The Permit Board should be consulted regarding minimum spacing recommendations for wells that will pump in excess of 1,500 gpm or 2.16 mgd.

Note: The following steps may prove helpful in using Table 1:

(a) To determine the minimum acceptable spacing distance between wells, locate the corresponding transmissivity (T) value of the aquifer in the left column of the table and then the anticipated discharge or pumping rate value across the top row of the table. The point in the shaded area of the table where the two values intersect indicates the acceptable spacing distance between wells in the same confined aquifer.

Example: A new 750 gallon per minute (gpm) well with a discharge rate of 1.08 million gallons per day (mgd) that is scheduled to pump from a confined aquifer with a transmissivity (T) of 9,000 squared feet per day (ft2/day) should be spaced at least 1,300 feet apart from another well using the same aquifer to avoid unacceptable interference.

(b) To determine the maximum acceptable discharge rate (mgd) or pumping rate (gpm) for a confined aquifer, consult the left column of Table 1 to find a comparable transmissivity (T) value for the aquifer being used and the body of the table to locate the distance (r) from the proposed well site to the nearest existing well in using the same aquifer. The corresponding discharge rate (mgd) and pumping rate (gpm) on the top of the appropriate column reflects the maximum acceptable pumpage for the well at the proposed location.

(2) The Permit Board will consider and may require spacing limitations for new wells or replacement wells using aquifers that are not confined under all conditions. Unconfined conditions also may exist in the recharge areas of confined aquifers.

(3) In cases where no feasible options appear to be available, applicants may make a written request for exemption from the well spacing requirements. The Board will consider such requests on a case-by-case basis and provide a written determination to the applicant.

D. Considerations and Limitations on Uses of Water

(1) Once-through, Non-contact Cooling Water – In general, the use of large volumes of groundwater for once-through, non-contact cooling purposes is not a beneficial use of groundwater resources and is contrary to principles of water conservation. Use of more than 20,000 gallons per day (gpd) for this purpose is prohibited, regardless of the size of the well or the source of the groundwater, unless approval is obtained from the Permit Board. Proposals to use less than 20,000 gpd will be considered by the Permit Board on a case-by-case basis.

(2) Uncontrolled Free-flowing Wells – Continuous uncontrolled discharge of groundwater from free-flowing wells is not a beneficial use of groundwater resources, is declared to be waste contrary to principles of water conservation, and may be prohibited by the Commission or the Permit Board, regardless of the size of the well or the source of the groundwater.

(3) Maintenance of Water Levels in Surface Water Impoundments for Aesthetic Purposes – A permit shall be required of any person in the business of developing real property for resale who desires to withdraw water from a well, regardless of surface casing diameter that is to be used for maintaining or enhancing an impoundment of surface water primarily for aesthetic purposes. In general, the withdrawal of groundwater to supply water to a surface impoundment that exists primarily for aesthetic purposes is discouraged. The Permit Board may, however, issue a permit for withdrawal of groundwater to supply water to a surface impoundment that is primarily for aesthetic purposes if the Permit Board finds that such use of the groundwater would be in the public interest and that the local availability of groundwater for higher priority uses, as specified in these regulations, would not be excessively adversely affected. In determining whether

such use of the groundwater would be in the public interest, the Permit Board shall consider, at a minimum, the following factors:

(a) The drainage area providing surface water run-off to the impoundment;

(b) The permeability of the soils that form the bottom of the impoundment;

(c) The volume of water required to fill the impoundment;

(d) The rate of groundwater withdrawal estimated to be required to maintain the level of water in the impoundment at the designed normal pool;

(e) The potential impacts of the requested groundwater withdrawal on the local availability of groundwater for higher priority uses, as specified in these regulations.

(4) Other Uses – The Permit Board may determine that other discharges/withdrawals of groundwater are not beneficial uses, constitute waste, and/or are prohibited to protect the public interest and may deny permits based on such determinations.

E. Reporting

(1) Within 30 days of the drilling completion date, data collected and/or received on the well must be filed with MDEQ by the water well contractor. This data includes, but is not limited to, the following:

(a) Any data that differs from the issued permit (i.e. depth, casing diameter, etc.);

(b) Copies of all borehole geophysical log(s);

(c) Driller's log;

(d) Drill cuttings (If available)

(e) Pump test information. (If available); *

(f) Analysis of water. (If available). *

* If the well is not developed and completed immediately upon completion of drilling, the pump test information and water analysis shall be submitted by the owner or by the contractor who subsequently completes the well within thirty (30) days of receipt of final report.

(2) Owners and operators of all water wells, regardless of size or use, that produce in excess of 20,000 gallons per day may be required to file an annual report on the volume of groundwater withdrawn each calendar year, and such other requirements

as the Commission may deem necessary or appropriate for proper water management. If required, these water use reports shall be filed with MDEQ prior to March 30 of each year on forms prescribed by the Permit Board.

(3) The quantity of groundwater withdrawn must be determined by one of the following:

(a) Flow meters accurate to within ten percent (10%) of meter calibration;

(b) The rated capacity of the pump (for the normal head associated with the well) multiplied by the total time in operation as recorded by an hour meter, electric meter, or log;

(c) The rated capacity of a cooling system multiplied by the total time in operation.

(d) Any other method approved by MDEQ that will provide reliable groundwater withdrawal data.

(4) MDEQ may require the installation of flow meters if data obtained by other means is determined to be inadequate or unreliable.

F. Replacement Wells – A replacement well may be drilled to replace a properly authorized well that has become unusable.

(1) Qualifications – To qualify as a replacement well for any use other than irrigation, aquaculture, or wildlife enhancement the new well must meet all of the requirements set forth in paragraphs a. through d. below. Any proposed well not meeting these requirements will be treated as a new well, and the required application will be processed accordingly. Replacement wells for irrigation, aquaculture, or wildlife enhancement need only meet the requirements set forth in paragraphs (a) through (c)below provided the water will be applied to the same field or pond served by the original well.

(a) Will replace a well that will be properly plugged and abandoned within 180 days of completion of the replacement well, unless used by MDEQ for data collection in accordance with paragraph 3 below; and

(b) Will withdraw water from the same water-bearing formation as the old well; and

(c) Will supply water for the same beneficial use as the old well; and

(d) Will be located within a 250-foot radius of the old well.

(2) Procedure – Construction of a qualifying replacement well does not require prior approval from the Permit Board or its designee. However, the owner of the well to

be abandoned must provide MDEQ written notification of the replacement within five (5) calendar days after initiating construction of the replacement well. The notification must clearly state that the new well is a replacement well meeting the criteria set forth in Rule 1.4.F.1.; must include the permit number for the well being replaced; and must provide the name of the licensed water well contractor responsible for construction of the replacement well. The Permit Board, or its designee, will assign an identification number to the replacement well and modify the permit associated with the well to be plugged and abandoned to reflect the change. The identification number for the replacement well will be provided by MDEQ to both the owner/permittee and the water well contractor for use on all subsequent correspondence and reports related to the well. No public notice or fee will be associated with construction of a replacement well.

(3) Decommissioning of Replaced Well – The well being replaced must properly be decommissioned in accordance with Rule 1.4.G. of this regulation no later than 180 days from the date the replacement well is completed, unless the Executive Director of MDEQ, or his designee, determines that the old well is suitable for conversion to an observation well or monitoring well and the landowner/permittee agrees to retain the well for that use. If such use is determined to be beneficial, a locking cover, sealed plate or other method of securing the well approved by MDEQ shall be provided by the landowner/permittee. If use of the observation well or monitoring well is later discontinued, the landowner/permittee will be responsible for properly decommissioning the well within 180 days of notification by MDEQ that MDEQ's use of the well is being discontinued.

G. Decommissioning Abandoned or Unused Water Wells and Holes

(1) Applicability – Except as stated in paragraph 2. below, the standards for decommissioning abandoned or unused water wells and boreholes apply to all abandoned water wells and to all boreholes that penetrate water bearing strata or are greater than twenty-five (25) feet in depth including potable water wells, agricultural wells, monitoring wells, observation wells, dewatering wells, relief wells, saline or brackish water withdrawal wells, contaminant recovery wells, heat pump water supply wells and closed-loop system holes, industrial supply wells, rig supply wells, geotechnical boreholes, cathodic protection wells and pilot boreholes.

All wells and boreholes that penetrate water bearing stratum with a depth of 25 feet, or greater, below land surface must properly be decommissioned by a water well contractor licensed by MDEQ. Water wells less than 25 feet in depth below land surface may be plugged by someone other than a licensed water well contractor. However, the same procedures and reporting requirements apply regardless of who plugs the well.

If approved in writing by MDEQ, properly cased and sealed wells may be provided with a locking cover capable of preventing the entrance of contaminants and used as monitoring wells or observation wells in lieu of abandonment. If the

use of an observation or monitoring well is later discontinued by MDEQ, the landowner/permittee shall be responsible for properly decommissioning the well.

(2) Exemptions – The following types of wells and boreholes are exempt from this paragraph G. Exemption under this regulation does not relieve the owner of the responsibility for identifying and complying with other applicable state and federal regulations.

(a) Saline water wells associated with enhanced oil and gas recovery operation, brine withdrawal wells, and other types of on-site oil and gas well holes, including Class II wells regulated under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901, *et seq*.

(b) Class I, III, IV and V injection wells regulated under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901, *et seq*. and

(c) Geotechnical boreholes drilled in planned roadbed construction areas where the natural overburden will be removed to within twenty-five (25) feet of the bottom of the hole.

(3) Types of Abandoned or Unused Wells – A water well may be considered by MDEQ to have been abandoned if its use has been permanently discontinued; if the well has not been used in the preceding 12 months (except for established rotations of pumping equipment between wells related to crop irrigation and instances where the owner has notified MDEQ of an anticipated longer period of nonuse after which the well will be placed back in service); if the pumping equipment has been removed (except for established rotations of pumping equipment between wells related to crop irrigation); or if the well cannot be repaired. Rig supply holes, geotechnical boreholes, pilot holes, and dewatering holes are considered abandoned immediately upon completion of the project phase for which they are drilled, unless the well is an integral part of the continued operation of the project, such as a pressure relief well or a permanently used dewatering well.

(4) Time Allowed for Plugging – Rig supply wells, pilot holes, and geotechnical boreholes shall be plugged within 30 days after abandonment or cessation of use. All other holes shall be plugged within 180 days after abandonment or cessation of use.

(5) Decommissioning Forms – Abandonment and plugging of water wells and boreholes shall be reported on a decommissioning form approved by and made available from MDEQ. The person or contractor who plugs an abandoned water well or borehole shall submit the decommissioning form to MDEQ within 30 days after completion of the plugging. For irrigation wells located in the MRVA, a copy of the form shall be submitted to YMD at the same time the original is submitted to MDEQ. Reporting the abandonment and plugging of multiple water

wells and/or boreholes on one form may be permissible, with prior approval from MDEQ, provided the same decommissioning procedure was used and the location of each water well and/or borehole is clearly identified.

(6) Decommissioning Procedures – The following procedures shall be adhered to in the decommissioning of any water well or borehole for which decommissioning is required under these regulations:

(a) Grout for all holes shall consist of neat cement, cement grout, cement-bentonite mixture (5-8% bentonite), or bentonite. Bentonite pellets may be added under free-fall conditions for depths not exceeding twenty-five (25) feet, providing pellets are placed in layers not more than five (5) feet deep and tamped into place after addition of each layer. Granulated or pelletized bentonite may be placed to greater depths if introduced through a tremie pipe. Free-fall addition of other types of grout from the surface is prohibited;

(b) Obstructions shall be removed from the well casing;

(c) If there is reason to question the physical integrity of the well casing because of the age of the well or the material used for the casing, or there are no records to indicate that the annular space was grouted properly during construction of the well, the driller shall consult with MDEQ before plugging the well. In such instances, MDEQ may require that the casing be perforated to allow the introduction of grout into cavities or voids that may have formed outside the casing; or may require that the casing be removed from the hole prior to grouting;

(d) For abandoned water wells in agricultural fields, the casing shall be cut off and removed down to a minimum depth of three feet below land surface. After plugging, the excavation shall be filled with compacted soil. In other areas, not regularly subjected to surface disturbance, the casing shall be cut off and removed at least down to the ground surface elevation;

(e) Abandoned water wells or boreholes shall be sealed from the bottom of the hole to ground surface or the top of the casing using a grout as described in paragraph 6.a. above.

(f) MDEQ may authorize alternate methods of abandonment and/or abandonment by other than a licensed water well contractor, provided the results will meet the intent of the regulations. Only detailed written requests to utilize an alternate method of abandonment or to abandon a well without utilizing a licensed water well contractor shall be considered for approval. If approved, MDEQ will provide written authorization to the requestor.

H. Installation of Control Devices on Flowing Wells - Control devices that are capable of stopping the waste of water are required on all wells that have a natural free-flowing condition above the ground surface, except for relief wells installed to protect the integrity of a structure.

MDEQ, upon receiving information about a free-flowing well, will send the landowner a written directive to install a control device on the well within a specified time limit and to operate the device in such a manner as to prevent waste of the water. The landowner shall provide MDEQ written notification when the control device has been installed and the waste of water has ceased. Failure to comply with a directive to install and operate a control device to stop the waste of water may result in enforcement action by the Commission.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 1.5 Confidential Information. Procedures for declaring submitted information confidential and for agency handling of such information are found in Miss. Code Ann. Section 49-17-39, Section 51-3-44, and the Commission's Regulations Regarding the Review and Reproduction of Public Records, Chapter 11, Part 1, Chapter 2.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 1.6 Enforcement. Enforcement of these regulations shall be governed by Miss. Code Ann. Section 51-3-49 through 51-3-55, and Sections 49-17-31 through 49-17-43.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 1.7 Correspondence and Adequacy of Notice.

A. General – All permittees and licensees shall inform MDEQ of any address changes within fifteen (15) days of any change of address, and must readily accept all mail sent to them from the Commission, MDEQ, or the Permit Board.

B. Registered or certified mail – Registered or Certified Mail sent with proper postage and to the last address provided to MDEQ by the permittee or licensee shall be considered adequate notification of notice served if MDEQ is notified that the mail was delivered and accepted or if the mail is returned as rejected or unclaimed by the addressee.

C. Refusal to accept mail – Refusal to accept mail from the Commission, the Permit Board, the Department, or its designee, shall be considered a violation of this regulation.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq., and 49-17-1, et seq.*

Part 7, Chapter 2: Mississippi Commission on Environmental Quality Licensing of Water Well Contractors Regulations

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Rule 2.1 Definitions. The words and phrases used in this regulation, shall have the following meanings:

A. Annular Space - The space between the borehole wall and the well casing or screen, or the space between a casing pipe and a liner pipe or between two strings of casing.

B. Applicant - Any person who submits an application to obtain a water well contractor's license.

C. Approved Education Provider – An organization that offers many educational courses for continuing education and has demonstrated, to the satisfaction of the Department, its qualifications to offer quality continuing education to water well contractors. Approved education providers are not required to submit every course they offer for Department approval.

D. Aquifer - a geologic formation, hydraulically connected group of formations, or part of a formation that can yield water to a well or spring.

(1) Confined Aquifer (Commonly referred to as artesian aquifers) – a permeable geologic layer or zone saturated with groundwater isolated from the atmosphere by impermeable confining layers. The ground water subjected to pressures higher than atmospheric pressure so that water in a well penetrating the aquifer will rise to some level above the actual top of the aquifer.

(2) Unconfined Aquifer (Commonly referred to as water table aquifers) a permeable geologic layer or zone saturated with groundwater at atmospheric pressure. These aquifers are generally not overlain by impermeable confining layers and may be vulnerable to contamination from surface activities or events that discharge pollutants on the ground.

E. Artesian - Groundwater under sufficient hydrostatic pressure to rise above the aquifer containing it.

F. Beneficial use - The application of water, excluding waste of water, to a purpose that produces economic or other tangible or intangible benefits to the state and its citizens. Such uses include, but are not limited to, diversions or withdrawals for public, industrial, or agricultural use.

G. Board or Permit Board – The Mississippi Environmental Quality Permit Board.

H. Certificate of Insurance – Proof of coverage under Contractors Liability Insurance.

I. Commission –The Mississippi Commission on Environmental Quality, or its designee.

J. Committee – The Water Well Driller's Advisory Committee.

K. Continuing Education Course – A course which has been approved by the Department as meeting the requirements of the regulations for continuing education. Only courses approved by the Department are considered applicable to meeting continuing education requirements, unless the course is presented by an approved education provider.

L. Days - Calendar days, unless specifically indicated otherwise in the body of this regulation.

M. Decommissioning - The complete and permanent sealing of a well bore to prevent contamination of the aquifer.

N. Department or MDEQ – The Mississippi Department of Environmental Quality.

O. Dewatering – The temporary lowering of the groundwater level to facilitate installation of underground utilities, construction of foundations, and various other purposes.

P. Domestic use - The use of water for ordinary household purposes, the watering of farm livestock, poultry, and domestic animals, and the irrigation of home gardens and lawns.

Q. Filter Pack - Smooth, uniform, clean sand or gravel placed in the annular space between the borehole wall and well screen to prevent sediments from entering the screen.

R. Fresh water - Water having a Total Dissolved Solids (TDS) concentration of less than 1,000 parts per million (ppm).

S. Geotechnical Boring - A hole constructed for the purpose of sampling, measuring, or testing the strata encountered for scientific, engineering, geological or regulatory purposes.

T. Groundwater - Water occurring beneath the surface of the ground.

U. Grout - A fluid mixture of neat cement and water, with additives such as sand, bentonite, or hydrated lime, or a mixture of bentonite and water, capable of producing a water-tight seal, that can be forced through a pipe or placed in an annular space, as required for sealing a well or an annular space to protect against intrusion of contamination.

V. Halliburton Method - A method of grouting casing in which the slurry is forced down the casing and into the annular space until slurry returns are obtained at the ground surface.

W. Inactive Status – The status assigned to a license by the Commission to indicate that the licensee may not practice well drilling and/or pump installation until the licensee has met the requirements of this regulation regarding renewal or reinstatement of the license.

X. Incompetency – An action or inaction by a licensee which demonstrates a general lack of knowledge or ability to practice water well drilling and/or pump installation.

Y. Landowner - The person, or entity, holding legal title to the surface of the land upon which a withdrawal or diversion of water is located.

Z. Licensee – Any individual who holds a valid Water Well Contractor's License issued by the state, or any company or corporation engaged in the business of water well contracting under a license duly issued to a designated principal, or key employee, in the company or corporation. Licenses will only be issued to individuals, and a company will be deemed to be licensed only if it has a principal or key employee who is licensed.

(1) Restricted Licensee – An individual holding a specialty driller's or pump installer's license who is restricted to performance of only such activities as may be specified in the conditions of the license. Typically, restrictions will be placed on the licenses of individuals who:

(a) only engage in specialized well or borehole construction such as drilling geotechnical boreholes, constructing environmental monitoring wells, or constructing geo-thermal systems; or

(b) only engage in limited aspects of the water well construction business such as pump and well equipment installation and service.

(2) Unrestricted Licensee – An individual holding a Water Well Contractor's License who is thereby authorized to engage, to the full extent allowed by this regulation, in the business of constructing, maintaining, and repairing water wells; installing and servicing pumps and related water well equipment; drilling special purpose boreholes; constructing monitoring wells; or any other work involving drilling, grouting, plugging, abandoning, or decommissioning water wells and boreholes. Companies, corporations, or other business entities, that are not individuals, will be deemed to have met the licensing requirement if a principal in the firm, or other key employee authorized to act for the firm, holds an unrestricted water well contractor's license.

AA. Misconduct – A willful or intentional action or inaction by a licensee that is contrary to the standard or accepted practice of the industry that would be applied by competent professionals, under the same circumstances.

BB. Municipal use - The use of water by a municipal government to promote the life, safety, health, comfort, and business pursuits of its people. The term does not include irrigation of crops that may be planted within the corporate boundaries.

CC. Office or OLWR - the Office of Land and Water Resources of MDEQ.

DD. Permitted use -

(1) The use of a specific amount of water at a specific time and at a specific place, authorized and allotted by the Board for a designated beneficial use within specific limits as to quantity, time, place, and rate of diversion or withdrawal; or

(2) The right to the use of water as specified in the permit, subject to the provisions of Mississippi Code Annotated Section 51-3-5, including the construction of waterworks or other related facilities.

EE. Person - The state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and including 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.

FF. Plugging — See "Decommissioning".

GG. Potable Water - Water that is suitable for human consumption and meets all primary drinking water standards (Primary Maximum Contaminant Levels) set by the United States Environmental Protection Agency (EPA).

HH. Potential Sources of Contamination – Sites or facilities that use, store, and/or dispose of substances (on site) that, due to their quantity, toxicity, and/or mobility, could impact the water quality of aquifers used for potable water supply. Examples of such sources include, but are not limited to, failing or inadequate individual sewage treatment and disposal systems, tanks used for bulk storage of petroleum products, Class V injection wells, container and drum storage sites, etc.

II. Public Water System –A system that provides potable water to the public through pipes or, after August 5, 1998, other conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty five (25) individuals daily at least 60 days out of the year. **Note: This duplicates a Mississippi State Department of Health definition. It is included in this regulation to serve as a reminder that wells exempted from regulation by MDEQ because the surface casing diameter is less than six (6) inches, may still be regulated by the Mississippi State Department of Health if they are part of a Public Water System.**

JJ. Pump Installation – The installation of pumps or pumping equipment for water wells, including the removal and re-installation of pumps or pumping equipment for service, repairs, or replacement.

KK. Pumps or Pumping Equipment – Any equipment or materials utilized or intended for use in withdrawing or obtaining water from water wells or surface water diversion points.

LL. Repair of Water Wells – Work on any water well involving re-drilling, deepening, changing casing and screen depths, re-screening, cleaning by use of chemicals, and re-development; or removing and re-installing pumps, pumping equipment, or any related equipment intended to draw water from the well.

MM. State Well Report – A report documenting information related to the drilling of a well or borehole and the development and completion of a water well together with any other data or information required by MDEQ, reported on forms provided by the MDEQ.

NN. Surface casing - That string of casing in any water well having the greatest outside diameter, regardless of whether it is located at or below ground level.

OO. Suspended Status – The status assigned to a license by the Commission to indicate that the licensee has willfully violated provisions of State law or of this regulation so as to endanger himself, others, the environment, and/or the public health.

PP. Test Boring and Coring – the removal and collection of soil samples from the earth by means of augers, core-barrels, spoons, wash casing and bailers for the purpose of obtaining geologic and hydrologic information.

QQ. Tremie pipe - a device, usually a small-diameter pipe, that carries grout or other material to the bottom of a borehole or casing and that allows pressure grouting from the bottom up without introduction of air pockets.

RR. Well or "water well" - a hole that is drilled, driven, bored, excavated, or otherwise penetrated into the ground to access, evaluate and/or withdraw groundwater. For purposes of this regulation, this definition does not pertain to wells constructed for the purpose of disposal of fluids or other materials, but does include:

(1) Abandoned Well - a well that has not been used within the preceding twelve month period, or one that has had the pump disconnected and/or removed for reasons other than maintenance, repair, or replacement.

(2) Dewatering Well - a well used for temporary removal of surface water or groundwater to facilitate construction or mining operations, or for permanent protection of a structure or activity from the effects of surface water or groundwater.

(3) Monitoring Well - a well used to obtain data on the quality of water in an aquifer system or at specified depths and locations related to a potential source of pollutant.

(4) Observation Well - a well used primarily for measuring the water level in an aquifer.

(5) Recovery Well - a well constructed for the purpose of recovering undesirable groundwater for treatment or removal of contaminants.

(6) Relief Well - a well constructed to provide pressure relief from an artesian aquifer or from excessive head differentials in water table aquifers.

(7) Replacement Well - a well drilled to replace an existing well that has become unusable, provided the new well meets the requirements set forth in these regulations.

(8) Standby Well – a well that can be placed in operation to withdraw water but is only used when water is temporarily unavailable from the primary source or sources because of mechanical failure, maintenance, or power failure.

(9) Test Well – a well drilled to explore for groundwater for a water supply well.

(10) Underground Discharge Well – a well in which the top of the casing terminates at a discharge head located below the frostline.

SS. Well Completion - term used collectively to refer to both the drilling and developing phases of well construction. For the purpose of reporting requirements established in this regulation, a distinction is made between completion of drilling and completion of well development:

(1) Completion of drilling – the date that drilling is completed and the drill rig is no longer required at the site.

(2) Completion of well development – the date that the well is fully functional and ready to provide water for its designated beneficial use, including having met any applicable water testing requirements.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.2 Applicability.

A. Any person, or any company, corporation, or other business entity engaging in a business or occupation that involves drilling of water wells or drilling boreholes that may penetrate water bearing strata (including constructing water wells, constructing geo-thermal systems, constructing environmental monitoring wells, conducting geotechnical investigations, conducting seismic exploration, or similar activities) or installing pumps or other equipment in water wells must first obtain the appropriate license or license renewal required pursuant to this regulation. A license is not transferable or assignable, and MDEQ will maintain a current register of licensees. If the applicant is a company, corporation, or other business entity that is not an individual, the application shall include the name of the designated individual who will hold the license for the company. A company will be deemed to be licensed only if it has a designated principal or other key employee who is licensed. The application shall be accompanied by a notarized affidavit signed by the applicant certifying that the individual applicant or the company's designee has a minimum of three (3) years qualifying experience in the practice for which the license is being sought.

B. Exemptions – For the purposes of these regulations, a person who owns or leases property in the state; or who otherwise owns a property interest allowing the drilling of a water well on, and the use of water under, property in the state may drill a water well on that property without having a Water Well Contractor's license provided:

(1) The well will be used only to supply water for domestic use to a single family dwelling which is the owner's or lessee's permanent residence; and/or to water livestock on the owner's or lessee's farm and/or to supply water for irrigating crops on the owner's or lessee's farm (crop irrigation exemption in effect until July 1, 2011 in accordance with MS Code Annotated Section 51-5-1); and

(2) The owner or lessee complies with applicable well construction standards contained in this regulation and the applicable regulations promulgated by the Mississippi State Department of Health.

C. Either a licensed water well contractor or an employee certified by the licensee in accordance with Rule 2.2.D. of this regulation must be on site and personally supervising operations during all critical stages of the drilling and completion of a potable water well including, but not limited to, collecting sand samples, logging the hole, setting the casing, grouting the well, setting the screen, placing the filter pack, developing and testing the well, and installing the pump.

D. Licensed water well contractors who have the capability to conduct simultaneous operations on multiple construction sites within the state may certify the competency of employees who will be in responsible charge of all on-site operations in the absence of the licensee. Within sixty (60) days after the effective date of this regulation, the licensee shall furnish MDEQ a list of the designated employees and a written certification that the listed employees are competent to perform and supervise all critical stages of drilling and completion of potable water wells. The list shall be updated and recertified by the licensee annually and submitted to MDEQ with the annual request for license renewal.

E. Neither these regulations, nor any permit issued thereunder, creates or includes any property right in favor of the permittee.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.3 Minimum Requirements For Licensing. An applicant for a license, as defined in this regulation, must submit a completed application on the form provided by MDEQ; and meet or comply with the requirements set forth below:

A. Water Well Contractor (Unrestricted License)

(1) Be at least twenty-one (21) years of age; and

(2) Be of good moral character; and

(3) If not previously licensed by the state, or if seeking reinstatement of a license, demonstrate, to the satisfaction of the Commission, a reasonable knowledge of state water laws, regulations, water well and borehole drilling practices, and pump and well equipment installation practices by passing such examinations as may be prescribed by the Commission, or its designee; and

(4) Provide proof that the applicant possesses, or has unrestricted access to, the necessary tools and equipment to engage in all aspects of the business of water well contracting;

(5) Provide evidence of at least three (3) years qualifying experience, i.e. experience in on-site supervision and being in responsible charge of all aspects of water well and borehole construction gained while working under the personal supervision of a water well contractor holding an unrestricted license, or its equivalent; and

(6) If not previously licensed by the state, provide notarized affidavits, as required by statute, from three (3) licensed water well contractors certifying that the applicant has the necessary qualifications and experience to meet the state's licensing standards at the level for which he is applying.

B. Specialty Driller or Pump Installer (Restricted License)

(1) Be at least twenty-one (21) years of age; and

(2) Be of good moral character; and

(3) Demonstrate, to the satisfaction of the Commission, a reasonable knowledge of state water laws, regulations, and the specific practices for which the restricted license is being sought by passing such examinations as may be prescribed by the Commission, or its designee;

(4) Provide written certification that they will only engage in the limited practice for which they are seeking the restricted license, such as constructing irrigation wells in the Mississippi River Valley Alluvial Aquifer (MRVA), constructing domestic wells less than six (6) inches in diameter, drilling geotechnical boreholes, constructing environmental monitoring wells, constructing geo-thermal systems, or installing and servicing pumps and related well equipment;

(5) Provide evidence of at least three (3) years of qualifying experience, i.e. experience gained while working under the direct supervision of a licensee engaged in the business or practice for which the license is being sought; and

(6) If not previously licensed by the state, provide notarized affidavits, as required by statute, from three (3) licensed water well contractors certifying that the applicant has the necessary qualifications and experience to meet the state's licensing standards at the level for which he is applying.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.4 Examination.

A. A license applicant shall be required to take such examinations as may be prescribed by MDEQ. Examinations will normally be administered to test:

(1) general knowledge of groundwater resources and wells,

(2) specialized knowledge in equipment, techniques, and practices appropriate to the license being sought, and

(3) specific knowledge of state laws, regulations, and construction standards.

Upon receipt of a completed application form and supporting documentation as set forth in Rule 2.3, MDEQ will contact the applicant to schedule the examinations. At that time, MDEQ will advise the applicant as to the types of examinations that will be administered, the general content of the examinations, and the availability of study materials.

B. The examinations will be taken at a time and place designated by MDEQ.

C. If the applicant fails to pass the examination(s), the examination(s) may be taken again upon written request, but not sooner than 30 days after the previous examination. If the applicant does not request re-examination within one (1) year, the application for license will be nullified and discarded.

D. MDEQ may waive a portion of the examination requirement for an applicant with a valid license from another state having license requirements substantially the same as those contained in this regulation. However, all applicants will be required to pass the examination on state laws, regulations and construction standards.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq.; 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.5 Fees.

A. License Fee – Upon passing the examination, the annual license fee of one hundred dollars ($100.00) must be paid before the license will be issued. The fee must be paid by check, money order, or electronic payment directed to MDEQ. **Do not send cash.**

B. Renewal Fee - An annual renewal fee of one hundred dollars ($100.00) must be paid to MDEQ with the request for renewal of a license.

C. Late Fees – A late fee of ten dollars ($10.00) per month, or any fraction thereof, will be assessed for renewal or reinstatement requests received after the expiration date of the last valid license.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq.; 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.6 License Renewal.

A. All licenses expire on June 30 and must be renewed annually. The licensee shall submit a completed renewal request form, provided by MDEQ, along with the appropriate fee to MDEQ prior to June 30. Re-examination is not required for timely renewal of a license.

B. Receipt of the renewal form and fee by MDEQ prior to June 30 shall have the effect of extending the old license until the new license and ID is issued, or until the applicant is notified that the request for renewal has been denied. If the request for renewal is not properly filed by June 30, the license will expire and the licensee shall cease all work for which a valid license is required until such time as the license has been reinstated.

C. A licensee may request that an expired license be re-instated by submitting to MDEQ the required renewal form and paying the appropriate fee plus accumulated late fees. Failure to request re-instatement within one (1) year after the expiration date may be deemed a forfeiture of the reinstatement option. Any request for reinstatement submitted thereafter may require submittal of a new application and be subject to the examination requirement.

D. Restricted licensees requesting renewal must submit a written certification that they will continue to work only in accordance with the conditions of the restricted license.

E. A completed continuing education form, provided by MDEQ, shall be submitted with the renewal form to MDEQ.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.7 Continuing Education.

A. All licensees are required to complete a minimum of four (4) hours of continuing education annually and submit proof as required by MDEQ. Every two (2) years, one (1) of the hours of continuing education must be on state rules and regulations as presented by MDEQ.

B. A licensee may be exempted from the continuing education requirements one of the following reasons:

(1) New licensees who have obtained their license less than one (1) year before the June 30th renewal deadline.

(2) Licensees who have experienced physical disability, serious illness, or other extenuating circumstances that prevent work for more than 180 days in a year. Supporting documentation must be furnished to MDEQ upon request.

(3) Licensees serving on temporary active duty in the armed forces of the United States for a period of time exceeding 180 days in a year. Supporting documentation must be furnished to MDEQ upon request.

C. Acceptable continuing education programs shall be designed to improve the license holder's professional skills and knowledge in the ground water industry. Course content shall be related to subjects such as well and pump standards, geologic characteristics of the state, state groundwater laws and related regulations, well construction and pump installation practices and techniques, drilling and job site safety, protection of public health related to drinking water, environmental protection, technological advances, and business management.

D. Continuing education hours may be earned as follows:

(1) Attending conferences or training hosted by regional or national associations of the ground water industry.

(2) Successful completion of correspondence, video, or electronic short courses/tutorials presented by approved education providers.

(3) Instruction of approved continuing education courses.

(4) Successful completion of courses, seminars, workshops, or lectures given by accredited educational institutions

E. Approval of Continuing Education Programs

(1) Continuing education programs must be approved by MDEQ.

(2) Applications to approve continuing education programs must contain the following minimum information:

(a) Description of course(s)

(b) Length of course(s) in actual training hours

(c) Name and qualifications of instructor(s)

(3) Upon receiving approval of a continuing education course or program, the provider is entitled to state that the course has been approved by the Mississippi Department of Environmental Quality – Office of Land and Water Resources for continuing education credit under the Licensing of Water Well Contractors Title 11, Part 7, Chapter 2, Rule 2.1, et seq.; or, if the program is approved then the provider is entitled to state that they are an approved educational provider by the Mississippi Department of Environmental Quality – Office of Land and Water Resources for continuing education under the Licensing of Water Well Contractors Title 11, Part 7, Chapter 2, Rule 2.1, et seq.

F. Proof of Continuing Education

(1) The license holder is responsible for the submission of proof of all approved training. Inability of the applicant to substantiate credit hours submitted is grounds for disallowance of the credits in question.

(2) Proof of continuing education will consist of:

(a) Official transcripts from an accredited educational institution

(b) A certificate of completion signed by the instructor or approved educational provider, containing the license holder's name, date of training, name of course and number of hours of actual training

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.8 Equipment. All drilling rigs, water trucks, service vehicles and other vehicles used in the normal drilling, construction, completion, or reworking of wells and boreholes, and/or the installation of pumping equipment must have the name of the licensee (person, firm, or corporation), and the letters "MS Lic." with the appropriate license number prominently and legibly displayed on both sides of the vehicle. The letters and numerals shall be not less than two (2) inches in height and be placed on a background of contrasting color. Drill rigs shall be registered with MDEQ, for identification purpose only, by completing and submitting forms provided by MDEQ for that purpose.

Source: Miss. Code Ann. *§§ 51-3-1, et seq.; 51-5-1, et seq.; 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.9 State Well Reports. The State Well Report will include sections for a driller's log, a well completion report, and a well modification report. The driller's log portion of the report shall be completed by the licensed contractor and submitted to MDEQ for all drilled wells and boreholes that penetrate water bearing strata. Water well contractors drilling irrigation wells into the Mississippi River Valley Alluvial Aquifer (MRVA) shall furnish a copy of the driller's log to the YMD Joint Water Management District (YMD) at the same time the original report is submitted to MDEQ. Driller's logs will not be required for geotechnical boreholes less than twenty-five (25) feet in depth that do not encounter water bearing strata; environmental monitoring wells less than twenty-five (25) in depth that are regulated under other state and federal environmental programs; or small diameter wells or sampling holes less than fifty (50) feet in depth that are established with direct push (geo-probe) equipment. If a water well is developed and completed by a water well contractor immediately upon completion of drilling, both sections of the form shall be completed by the contractor and the report submitted to MDEQ within thirty (30) days after completion of the well. If for any reason a well is not developed and completed immediately upon completion of drilling, the following procedure shall be followed:

A. The driller's log section of the well report form provided by MDEQ shall be completed by the water well contractor who constructed the well or borehole and submitted to MDEQ within thirty (30) days after completion of drilling. For all water wells and boreholes, the driller's log section of the report must be signed by an appropriately licensed water well contractor. The driller's log entries on the report form shall be true, accurate, and complete. Portions of the form that may not be applicable shall contain an entry to that effect. Incomplete or inaccurate submittals will be returned to the licensee for completion or correction, but the 30-day filing period will not be extended. If the properly-executed form is not on file with MDEQ by the end of the 30-day period, the licensee will be deemed to be in non-compliance and may be subject to penalties as prescribed by statute and this regulation. The water well contractor filing the report shall keep a copy of the submittal and provide a copy to the owner of the well or borehole. For geotechnical investigations, the licensee may submit boring logs generated

for a site report in lieu of the MDEQ form, provided the logs include all required information.

B. If a water well is completed by someone other than the water well contractor who constructed the well, the owner of the well shall be responsible for providing a copy of the state well report form containing the previously completed driller's log to the licensee responsible for completion of the well.

C. The licensee who develops and completes the well shall fill out the well completion section of the well report on the copy of the form containing the previously submitted driller's log and submit the completed report to MDEQ within thirty (30) days after completion of the well. For all water wells, the well completion section of the report must be signed by an appropriately licensed water well contractor. The entries on the report form relating to well completion shall be true, accurate, and complete. Portions of the form that may not be applicable shall contain an entry to that effect. Incomplete or inaccurate submittals will be returned to the responsible licensee for completion or correction, but the 30-day filing period will not be extended. If the properly-executed form is not on file with MDEQ by the end of the 30-day period, the licensee will be deemed to be in non-compliance and may be subject to penalties as prescribed by statute and this regulation. The water well contractor filing the report shall keep a copy of the submittal and provide a copy to the owner of the well.

D. The well modification report shall be filed with MDEQ by the licensed water well contractor within thirty (30) days after any major modification to, or rehabilitation of, an existing well six (6) inches or greater in diameter. The report shall include the water use permit number associated with the well and a detailed description of the work performed. When a well that does not comply with current construction standards requires major modifications or rehabilitation, the work shall include items necessary to bring the well up to current minimum standards set forth in Rule 2.12.A.1.b., c. and d.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.10 Suspension/Revocation of License. Grounds for the suspension or revocation of a license are as follows:

A. Providing false information in an application for a license or any affidavit required in the licensing process;

B. Violating any provision of Miss. Code Ann. Sections 51-5-1, *et seq*., or this regulation;

C. Attempting to obtain a license by fraud or misrepresentation;

D. Participating in fraudulent, deceptive, or dishonest business practices;

E. Demonstrated incompetency as a driller and/or pump installer;

F. Failure or refusal to file accurate and timely reports as required by this regulation; or

G. Failure to obey Orders, Rules and Regulations of the Commission, including refusal to accept or receive official correspondence from the Commission or its designee.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq.,49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.11 Hearings and Appeals. Procedures for hearings and appeals of Commission decisions are set forth in Miss. Code Annotated, Sections 51-5-7 and 51-5-9.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.12 Design Criteria And Construction Standards. The Licensee shall be responsible for compliance with all applicable state and federal statutes and regulations.

A. Water Wells and Boreholes Penetrating Aquifers In General Use For Domestic and Public Water Supply – The standards contained herein are the minimum construction standards considered necessary for the protection of the state's high-quality groundwater resources. Other regulatory programs may be applicable and additional standards may be required for certain types of facilities, such as Mississippi State Department of Health regulations governing public supply wells. If a water well contractor encounters geologic formations or unusual circumstances that appear to dictate a deviation from the standards, the contractor shall consult with MDEQ staff regarding proposed construction procedures for the water well or borehole in question.

(1) Construction Standards – The following construction standards apply to wells and boreholes penetrating water bearing strata including but not limited to, potable water wells, irrigation wells, monitoring wells, observation wells, underground discharge wells, dewatering wells, saline or brackish water withdrawal wells, contaminant recovery wells, heat pump water supply holes and vertical closed-loop system holes, industrial supply wells, cathodic protection wells, rig supply wells and geotechnical boreholes:

(a) All water wells and boreholes covered under this section shall be constructed by a licensed water well contractor unless specifically exempted by statute.

(b) Well casing shall terminate not less than twelve (12) inches above natural ground elevation or, where practicable, above the 100-year flood elevation. However, if flood levels around the well routinely exceed a reasonable height for an extended casing above the twelve (12) inch minimum, then the well shall be fully sealed with a Braden Casing Head, or approved equivalent, to prevent the flow of flood waters into the casing. The casing head shall contain a screw-in plug with a minimum diameter of one-half (1/2) inch to provide access for water level measurements. If the casing is not covered with a recorder box or pump housing, then it must have a locked, overlapping cover or other suitable

cover capable of preventing unauthorized access to the casing head and access plug.

(c) Public water supply wells shall have the top of the well casing set at least one (1) foot above the 100-year flood level.

(d) All wells shall have a check valve installed in the discharge line to prevent the intentional or accidental introduction of contaminants into the well. All new unmetered wells larger than six (6) inches in diameter shall have a minimum of four (4) feet of straight pipe installed between the casing head and the check valve, and all other equipment, valves, pressure relief valves, vacuum breakers, and distribution systems shall be connected on the discharge side of the check valve.

(e) All wells, except approved underground discharge wells as specified in paragraph o. below, shall be constructed in such a manner that the finished ground elevations around the casing are sloped to drain away from the casing. Equipment such as engines, pressure tanks, or fuel tanks to be installed shall be placed on pre-cast concrete blocks or pads to prevent differential settlement that could result in damage to the pump and the well.

(f) The annular space on all wells covered by this section of the regulation shall be grouted from a depth of at least ten (10) feet below the surface to the surface, except as specified in paragraphs g, i, j, k, l, m, o, and p below.

(g) Wells located within one hundred (100) feet of a potential source of pollution such as sewers, septic tanks, landfills, and waste and raw material piles shall be grouted from a depth of at least fifty (50) feet below the land surface to the surface, except as specified in paragraphs h, i, j, k, l, n, and o below.

(h) Potable water wells shall not be constructed within 100 feet of any potential source of pollution.

(i) Wells located within one-quarter mile of a known existing area of contaminated aquifer shall be grouted from the top of the water bearing stratum to the ground surface, or the top of the casing for underground discharge wells.

(j) Outer casing for wells serving public water supply systems shall be grouted from the top of the target water bearing stratum to the ground surface.

(k) monitoring wells shall be grouted from the top of the seal or filter pack to the ground surface, unless a more stringent requirement is mandated by other applicable regulatory programs. Specifics of monitoring well construction shall follow the most stringent requirements of the applicable regulatory programs.

(l) Cathodic protection wells shall be grouted from a depth of fifty (50) feet below ground surface to the ground surface. Wells constructed with granular material such as gravel from the top of the anodes to near the surface are prohibited. If wells are no longer used, the vent pipe, casing or other non-grouted openings shall be grouted from a depth of at least ten (10) feet below the ground surface to the ground surface.

(m) For continuous lengths of grout not separated by multiple screens, grout shall be introduced in one continuous operation from the top of the water rearing stratum to the ground surface.

(n) Grout for all holes covered under this section shall consist of either neat cement, cement grout, cement-bentonite mixture (5-8% bentonite), or bentonite. Bentonite pellets or bentonite chips may be added under free-fall conditions for depths not exceeding twenty-five (25) feet. Free-fall addition of any other type grout from the surface is prohibited. Granulated or pelletized bentonite may be placed to greater depths only if introduced through a tremie pipe.

(o) All wells, regardless of size, which are drilled through or into aquifers containing chloride concentrations in excess of 250 milligrams per liter (mg/l) and/or total dissolved solids (TDS) concentrations in excess of 1000 milligrams per liter (mg/l), must be completed using metal casing. Furthermore, all such wells shall be completed using only the casing method of grouting (Halliburton method) to grout thoroughly the annular space from the bottom of the casing to ground surface or to the top of the casing for underground discharge wells.

(p) Outer casing for underground discharge domestic wells shall be grouted from a depth of at least ten (10) feet below the top of the casing at the underground discharge head, or pitless adapter, to the top of the casing.

(q) Public water supply wells shall be constructed in such a manner that any column/casing vents and blowoff valves are properly screened.

(2) Disinfection

(a) All water used in the drilling or construction process and in well development shall be clean and free of impurities that could contaminate water bearing sands penetrated by the well or borehole. For construction and development of a potable water well, water shall be obtained from a groundwater source of proven quality such as a domestic well or a public water supply system. If the water is obtained from a local public water supply distribution system, it need not have additional chlorine added during the drilling and/or construction process; otherwise, the water shall be chlorinated. A residual of free chlorine of not less than 5 parts per million (ppm) shall be maintained in any water used for well development.

(b) Gravel to be placed in potable water wells shall be disinfected with a solution of at least 50 mg/l free chlorine. (Clean pre-packaged gravel is exempt from this requirement.)

(c) Upon completion of drilling potable water wells, the well and adjacent aquifer shall be disinfected using a solution of at least 50 mg/l free chlorine applied for at least 24 hours. The procedure shall meet or exceed the American Water Works Association (AWWA) Standard current at the time of the activity.

(d) After disinfection, the potable water well shall be pumped until a chlorine free sample is collected from the well. The sample also must be free of coliform bacteria. Samples shall be collected, submitted, and analyzed in accordance with applicable Mississippi State Department of Health requirements.

B. Water Wells and Boreholes Constructed in the Mississippi River Valley Alluvial Aquifer (MRVA) – The MRVA is a uniquely situated shallow aquifer used almost exclusively for agricultural irrigation with very little potential of increased demand for domestic or public water supply. Because of the unconsolidated nature of the material and the predominant agricultural water use, the drilling technique in general use for large diameter irrigation wells in the MRVA is reverse circulation rotary drilling. Consequently the standards for construction and disinfection have been modified slightly to reflect the water usage and drilling practices in the MRVA. If a water well contractor encounters geologic formations or unusual circumstances that appear to dictate a deviation from the standards, the contractor shall consult with MDEQ staff regarding proposed construction procedures for the water well or borehole in question.

(1) Construction Standards – The following construction standards apply to irrigation wells screened and completed in the MRVA and to boreholes that do not penetrate the base of the MRVA, including but not limited to, irrigation wells, monitoring wells, observation wells, and geotechnical boreholes:

(a) All water wells and boreholes covered under this section shall be constructed by a licensed water well contractor unless specifically exempted by statute.

(b) Well casing shall terminate not less than twelve (12) inches above natural ground elevation or, where practicable, above the 100-year flood elevation. However, if flood levels around the well routinely exceed a reasonable height for an extended casing above the twelve (12) inch minimum, then the well shall be fully sealed with a Braden Casing Head, or approved equivalent, to prevent the flow of flood waters into the casing. The casing head shall contain a screw-in plug with a minimum diameter of one-half (1/2) inch to provide access for water level measurements. If the casing is not covered with a recorder box or pump housing, then it must have a locked, overlapping cover or other suitable cover capable of preventing unauthorized access to the casing head and access plug.

(c) All wells shall have a check valve installed in the discharge line to prevent the intentional or accidental introduction of contaminants into the well. All new unmetered wells larger than six (6) inches in diameter shall have a minimum of four (4) feet of straight pipe installed between the casing head and the check valve, and all other equipment, valves, pressure relief valves, vacuum breakers, and distribution systems shall be connected on the discharge side of the check valve.

(d) All wells, except approved underground discharge wells, shall be constructed in such a manner that the finished ground elevations around the casing are sloped to drain away from the casing. Equipment such as engines, pressure tanks, or fuel tanks to be installed shall be placed on pre-cast concrete blocks or pads to prevent differential settlement that could result in damage to the pump and the well.

(e) The annular space on all wells covered by this section of the regulation shall be grouted or sealed with bentonite from the lowest level of disturbed earth immediately adjacent to the casing down to a depth of at least ten (10) feet below that level, except as specified in paragraphs of. and g. below.

(f) Wells located within one hundred (100) feet of a potential source of pollution such as sewers, septic tanks, landfills, and waste and raw material piles shall be grouted from the lowest level of disturbed earth immediately adjacent to the casing down to a depth of at least fifty (50) feet below that level, except as specified in paragraph g. below.

(g) Wells located within one-quarter mile of a known existing area of

contaminated aquifer shall be grouted from the lowest level of disturbed earth immediately adjacent to the casing to the top of the water bearing stratum.

(h) Grout for all holes covered under this section shall consist of either neat cement, cement grout, cement-bentonite mixture (5-8% bentonite), or bentonite. Bentonite pellets or bentonite chips may be added under free-fall conditions for depths not exceeding twenty-five (25) feet. Freefall addition of any other type grout from the surface is prohibited. Granulated or pelletized bentonite may be placed to greater depths only if introduced through a tremie pipe.

(2) Drilling Fluids and Disinfection

(a) All water used in the drilling or construction process and in well development for non-potable water wells in the MRVA shall be dosed to a minimum concentration of fifty parts per million (50 ppm) of chlorine, i.e., two (2) gallons of sodium hypochlorite (laundry bleach, approximately five percent (5%) available chlorine) per one thousand (1000) gallons of drilling water.

(b) The licensee shall denote on the driller's log portion of the State Well Report the location of the source of any surface water used as well as the method of dosing and the volume of chlorine used in the drilling and development of a non-potable water well in the MRVA.

(c) Equipment used in the transport, storage, or circulation of surface water during the drilling and development of a non-potable water well in the MRVA shall not be used thereafter in the drilling and development of a potable water well without having first been disinfected with a solution of at least fifty parts per million (50 ppm) free chlorine for a minimum contact time of twenty-four (24) hours.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.13 Maintenance and Service Criteria for Public Water Wells.

A. General – Installation of pumps and well equipment shall be in accordance with the manufacturer's recommendation and this regulation. All pumps and well equipment shall be designed and installed so as to prevent contamination of the well.

(1) Licensing – Pump installation shall be performed either by a Water Well Contractor holding an unrestricted license or by a restricted licensee who specializes in pump installation and well service.

(2) Location of pressure tanks and switches – Pressure tanks and switches located above ground shall be on a concrete slab or preformed pad or blocks. Tanks and switches installed below grade shall be in a concrete pit or basement designed to be adequately drained, unless approved for direct burial. A pressure tank may be buried provided the tank is designed for that type installation. Tanks to be installed inside the bore of a water well must be designed for that purpose and approved by the Commission.

(3) Temporary seal – If the pump and well equipment are not installed immediately upon completion of drilling, all openings to the well must be closed to prevent pollution or vandalism. After pump installation, all open spaces must be sealed off to prevent contamination of the ground water.

(4) Drop pipe, wire, etc. – All drop pipe, wire, pumps, and other pumping equipment to be installed in the well shall either be new or be disinfected with a solution of at least 50 mg/l free chlorine; and it shall be installed in such a manner as to permit removal and repair of all equipment. If equipment or tools are lost in the well and not recovered, a statement describing the item or items lost shall be attached to the well completion report submitted to MDEQ.

(5) Prevention of contamination – Pumping equipment shall be installed in such a manner as to prevent the entrance of contamination into the ground water. Discharge pipes shall be fitted with devices which will prevent the entrance of small animals.

(6) Check valves – Pumping equipment installed and used in conjunction with Chemigation, which is the practice of injecting agricultural chemicals into irrigation lines in order to mix and distribute the chemicals with the water flowing through the irrigation system, shall have either two check valves, or other means of backflow prevention as may be approved by MDEQ, installed between the well head and the point of introduction of any chemicals.

B. Submersible pump installation

(1) Check valves – Submersible Pumps shall have no less than 2 check valves installed. One check valve must be installed above ground.

(2) Wire -- Wire shall be secured to the drop pipe in a manner which will support the weight of the wire and keep the wire close to the pipe.

(3) Clamps -- All clamps used shall be all stainless steel.

C. Jet pump installation

(1) Check valves -- Jet Pumps shall have a check valve installed on the discharge side of the pressure tank.

(2) Clamps - All clamps used shall be all stainless steel.

D. Turbine pump installation

(1) Steel column pipe for line shaft turbine pumps – Steel column pipe for turbine pump irrigation wells shall be standard weight flanged or threaded steel pipe.

(2) Plastic column pipe may be used for turbine pump installation provided the pipe is designed and manufactured for that purpose.

E. Pressure systems – All pressure systems will have a pressure relief valve installed between the well seal and pressure switch.

F. Power and control wiring - Licensees may run power and control wiring from a disconnect box to water well equipment. A license issued pursuant to this regulation does not authorize the licensee to alter the existing electrical service to any building or structure or perform any other electrical work covered by the National Electric Code (NEC) or local building codes.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.14 Decommissioning of Abandoned or Unused Water Wells and Boreholes.

A. Applicability

(1) Except as stated in paragraph B. below, the standards for decommissioning abandoned or unused water wells and boreholes apply to all abandoned water wells and to all boreholes that penetrate water bearing strata or are greater than twenty-five (25) feet in depth including potable water wells, agricultural wells, monitoring wells, observation wells, dewatering wells, relief wells, saline or brackish water withdrawal wells, contaminant recovery wells, heat pump water supply wells and closed loop system holes, industrial supply wells, rig supply wells, geotechnical boreholes, cathodic protection wells and pilot boreholes.

(2) All wells and boreholes that penetrate water bearing stratum with a depth of 25 feet, or greater, below land surface must properly be decommissioned by a water well contractor licensed by MDEQ. Water wells less than 25 feet in depth below land surface may be plugged by someone other than a licensed water well contractor. However, the same procedures and reporting requirements apply regardless of who plugs the well.

(3) If approved and accepted in writing by MDEQ, properly cased and sealed wells may be provided with a locking cover capable of preventing the entrance of contaminants and used as monitoring wells or observation wells in lieu of abandonment. If the use of an observation or monitoring well is later discontinued by MDEQ, the landowner/permittee shall be

responsible for having the well properly decommissioned by a licensed water well contractor.

B. Exemptions - Exemption from this regulation does not relieve the owner of the responsibility for identifying and complying with other applicable local, state, and federal regulations. The following types of wells and boreholes are exempt from decommissioning requirements set forth in this regulation:

(1) Saline water wells associated with enhanced oil and gas recovery operation, brine withdrawal wells, and other types of on-site oil and gas well holes, including Class II wells regulated under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901, et seq.;

(2) Class I, III, IV and V injection wells regulated under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Sections 6901, et seq.; and

(3) Geotechnical boreholes less than twenty-five (25) feet in depth that do not penetrate water bearing strata and boreholes drilled in planned roadbed construction areas where the natural overburden will be removed to within twenty-five (25) feet of the bottom of the hole.

C. Types of Abandoned or Unused Wells – A water well may be considered by MDEQ to have been abandoned if its use has been permanently discontinued; if the well has not been used in the preceding 12 months (except for established rotations of pumping equipment between wells related to crop irrigation and instances where the owner has notified MDEQ of an anticipated longer period of nonuse after which the well will be placed back in service.); if the pumping equipment has been removed (except for established rotations of pumping equipment between wells related to crop irrigation); or if the well cannot be repaired. Rig supply holes, geotechnical boreholes, pilot holes, and dewatering holes are considered abandoned immediately upon completion of the project phase for which they are drilled, unless the well is an integral part of the continued operation of the project, such as a pressure relief well or a permanently used dewatering well.

D. Time allowed for plugging - Rig supply wells, pilot holes, and geotechnical boreholes shall be plugged within 30 days after abandonment or cessation of use. All other holes shall be plugged within 180 days after abandonment or cessation of use.

E. Decommissioning Forms -- Abandonment and plugging of water wells and boreholes shall be reported on a decommissioning form approved by and made available from MDEQ. The person or contractor who plugs an abandoned water well or borehole shall submit the decommissioning form to MDEQ within 30 days after completion of the plugging. For irrigation wells located in the MRVA, a

copy of the form shall be submitted to YMD at the same time the original is submitted to MDEQ. Reporting the abandonment and plugging of multiple water wells and/or boreholes on one form may be permissible, with prior approval from MDEQ, provided the same decommissioning procedure was used and the location of each water well and/or borehole is clearly identified.

F. Decommissioning Procedures – The following procedures shall be followed in the decommissioning of any water well or borehole for which decommissioning is required under this regulation:

(1) Grout for all holes shall consist of neat cement, cement grout, cement bentonite mixture (5-8% bentonite), or bentonite. Bentonite pellets may be added under free-fall conditions for depths not exceeding twenty-five (25) feet, providing pellets are placed in layers not more than five (5) feet deep and tamped into place after addition of each layer. Granulated or palletized bentonite may be placed to greater depths if introduced through a tremie pipe. Free-fall addition of other types of grout from the surface is prohibited;

(2) Obstructions shall be removed from the well casing;

(3) If there is reason to question the physical integrity of the well casing because of the age of the well or the material used for the casing, or there are no records to indicate that the annular space was grouted properly during construction of the well, the driller shall consult with MDEQ before plugging the well. In such instances, MDEQ may require that the casing be perforated to allow the introduction of grout into cavities or voids that may have formed outside the casing; or may require that the casing be removed from the hole prior to grouting;

(4) For abandoned water wells in agricultural fields, the casing shall be cut off and removed down to a minimum depth of three feet below land surface. After grouting, the excavation shall be filled with compacted soil. In other areas, the casing shall be cut off and removed at least down to the ground surface elevation. MDEQ may authorize alternate methods of abandonment and/or abandonment by other than a licensed water well contractor, provided the results will meet the intent of the regulations. Only detailed written requests to utilize an alternate method of abandonment or to abandon a well without utilizing a licensed water well contractor shall be considered for approval. If approved, MDEQ will provide written authorization to the requestor.

(5) Abandoned water wells or boreholes shall be sealed from the bottom of the hole to ground surface using a grout as described in paragraph 1 above.

(6) MDEQ may authorize alternate methods of abandonment and/or abandonment by other than a licensed water well contractor, provided the results will meet the intent of the regulations. Only detailed written

requests to utilize an alternate method of abandonment or to abandon a well without utilizing a licensed water well contractor shall be considered for approval. If approved, MDEQ will provide written authorization to the requestor.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.15 Enforcement. Enforcement of these regulations shall be governed by Miss. Code Ann. Sections 51-5-7 and 51-5-17, and Sections 49-17-31 through 49-17-43.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.16 Correspondence and Adequacy of Notice.

A. General – All permittees and licensees shall inform MDEQ of any address changes within fifteen (15) days of any change of address, and must readily accept all mail sent to them from the Commission, MDEQ, or the Permit Board.

B. Registered or certified mail – Registered or Certified Mail sent with proper postage and to the last address provided to MDEQ by the permittee or licensee shall be considered adequate notification of notice served if MDEQ is notified that the mail was delivered and accepted or if the mail is returned as rejected or unclaimed by the addressee.

C. Refusal to accept mail – Refusal to accept mail from the Commission, the Permit Board, the Department, or its designee, shall be considered a violation of this regulation.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 2.17 Confidential Information. Procedures for declaring submitted information confidential and for agency handling of such information are found in Miss. Code Ann. Section 49-17-39, Section 51-3-44, and the Commission's Regulations Regarding the Review and Reproduction of Public Records (Chapter 11, Part 1, Chapter 2).

Source: Miss. Code Ann. §§ 51-3-1, et seq., 51-5-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.

Part 7, Chapter 3: Mississippi Commission on Environmental Quality Dam Safety Regulations

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Appendix A Hydrologic Design Criteria

Rule 3.1 Definitions.

The words and phrases used in this regulation shall have the meanings set forth in this section:

Alter or Repair - Any change in the surface or cross-section of existing dams and/or appurtenant works or any modification to appurtenant structures, other than minor grading and fill associated with routine slope and turf maintenance activities. Examples of alterations or repairs include such work as adding significant amounts of material to, or removing material from, the cross-section of a dam; changing the dimensions or elevations of an auxiliary (emergency) or overflow spillway; replacing pipe or in any other way altering a principal spillway; making any repairs of erosion or undermining associated with seepage through the dam; building a roadway on or across any part of a dam; burying pipelines; or in any way altering the approved operational features of a dam.

Appurtenant Works - This term includes, but is not limited to; spillways, either in the dam or separate there from; the reservoir and its rim or shoreline; low level outlet works; and water conduits such as tunnels, pipelines, or penstocks, either through the dam or its abutments.

Breach - Partial removal of a dam by creating a channel through the dam to the original stream bed elevation, so that no water is impounded by the breached structure.

Commission - The Mississippi Commission on Environmental Quality, or its designee.

Dam - Any artificial barrier, including appurtenant works, constructed to impound or divert water, waste water, liquid borne materials, or solids that may flow if saturated. All structures necessary to maintain the water level in an impoundment or to divert a stream from its course will be considered one dam.

Days - Calendar days including Saturdays, Sundays, and Holidays; unless specifically indicated otherwise in the body of this regulation.

Department or MDEQ - The Mississippi Department of Environmental Quality.

Emergency Action Plan - A formal written document identifying the area that would be inundated in the event of a dam failure and setting forth the plans and procedures for notifying the individuals, agencies, and public officials that would mobilize resources to respond to the emergency.

Emergency -This term includes, but is not limited to, uncontrolled breach of a dam; or any conditions leading to, or causing, a breach, overtopping, or any other condition in the dam and/or its appurtenant works that may lead to failure of the dam or otherwise pose a threat to life or property.

Enlarge -Any change in, or addition to, an existing dam or reservoir, which raises, or may raise the water storage elevation or storage volume of the water, waste-water, or liquid- borne material impounded by the dam.

High Hazard-A class of dam in which failure may cause loss of life, serious damage to residential, industrial, or commercial buildings; or damage to, or disruption of, important public utilities or transportation facilities such as major highways or railroads. Dams which meet the statutory thresholds for regulation that are proposed for construction in established or proposed residential, commercial, or industrial areas will be assigned this classification, unless the applicant provides convincing evidence to the contrary.

Impoundment or Reservoir - A man-made dammed, leveed, or diked area or basin designed to store water or other liquids above surface levels that would occur under natural conditions.

Incremental Consequence Analysis – Incremental Consequence Analysis is an analysis to determine the flood above which there is a negligible increase in downstream water surface elevation, velocity, and/or consequences due to failure of the dam when compared to the same flood without dam failure.

Inflow Design Flood - the flood event used to determine the design dimensions for the dam and spillways

Low Hazard - A class of dam in which failure would at the most result in damage to agricultural land, farm buildings (excluding residences), or minor roads.

Permit - Official written authorization from the Board, or its designee, authorizing construction, enlargement, repair, or alteration of a dam; including any specified conditions or limitations under which the work is to be performed by the person to whom the approval is granted.

Permit Board or Board - The Mississippi Environmental Quality Permit Board.

Person - The state or other agency or institution thereof, any municipality, political subdivision, public or private corporation, individual, partnership, association or other entity, and including 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.

Probable Maximum Precipitation (PMP) - The rainfall event used for hydraulic design of dams and appurtenant spillways in Mississippi. The Probable Maximum Precipitation (PMP) varies by location within the state and the event used in design shall be as defined for the proposed

construction location by Hydrometeorological Reports published by the Office of Hydrology, National Weather Service.

Professional Engineer— An engineer with a minimum of 5 years' experience in the design and construction of dams who is registered with the State of Mississippi Board of Registration for Professional Engineers and Land Surveyors.

Professional Geologist - A geologist with experience in determining and analyzing geologic conditions affecting the siting of dams who is registered with the Mississippi State Board of Registered Professional Geologists.

Removal - Complete elimination of the dam embankment or structure to restore the approximate original topographic contours of the area.

Significant Hazard - A class of dam in which failure poses no threat to life, but may cause significant damage to main roads, minor railroads, or cause interruption of use or service of public utilities.

Substantial Completion – Substantial completion means the dam is capable of impounding water

Sunny Day Top of Dam – A condition in which the water surface elevation in the lake is at the elevation of the low point on the crest of the dam and the downstream channel is considered dry prior to a failure of the dam.

Water Storage Elevation - The maximum surface elevation of water that can be maintained by a dam or reservoir.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.2 Permitting Applicability, Exceptions, and Limitations.

A. Applicability

(1) Except as otherwise provided in this section, any person or entity proposing to construct, enlarge, repair, or alter a dam or reservoir in the state of Mississippi must obtain a permit from the Permit Board, or its designee, prior to commencement of any site work related to the project. Application for such permits shall be made on a form prescribed by the Board and will be processed by the Board in accordance with Mississippi Code Annotated, Section 49-17-29.

(2) The Board may require submittal of any information deemed necessary to

evaluate a proposal to construct, enlarge, repair, or alter a dam or reservoir. Once the Board has authorized the project, the applicant shall not modify the approved design, plans, specifications, or construction methods, or act according to such modified documents, without first obtaining a revised permit from the Permit Board.

(3) Any person intending to acquire the right to store or use water from a reservoir formed by a dam, regardless of whether or not a permit is required under this regulation, shall submit an application for a surface water use permit to MDEQ in accordance with Mississippi Code Annotated, Sections 51-3-5 and 51-3-7, and the regulations of the Commission promulgated thereunder.

B. Exceptions

(1) A permit is not required for emergency repairs to a dam which is in imminent danger of failing. However, the dam owner shall report such emergency repairs to MDEQ by close of business on the next business day following the incident and file a written report with MDEQ within five (5) days of the incident.

(2) A permit shall not be required for:

(a) a peripheral dam or barrier eight (8) feet or less in height, measured from the point of lowest elevation of its toe, regardless of the impounded storage volume; or

(b) a dam that impounds twenty-five (25) acre-feet or less at maximum storage volume; or

(c) a dam that does not impound a watercourse with a continuous flow of water, as determined by the Commission;

Any person or entity proposing to construct, enlarge, repair, or alter any dam or reservoir in reliance upon the provisions of Rule 3.2.B.2.a through c to exempt the project from the requirement to obtain a permit must submit a notification of the planned project to MDEQ prior to the onset of construction. If, upon review of such notification, the Commission determines that the proposed dam poses a potential threat to downstream lives and property; the person or entity proposing the project may be required to comply with design and safety requirements contained in Rule 3.4 of this regulation. The Commission may enforce compliance with such design and safety standards in the interest of public safety, notwithstanding the fact that a permit may not be required for the project. The pre-construction notification shall be submitted on a form prescribed by the Permit Board.

(3) Prior authorization is not required for recurring routine maintenance activities including but not limited to mowing, grading or filling ruts in roadways that cross the dam, filling ruts or repairing other surface damage caused by vehicles or animals on the slopes, filling eroded areas in the surface of an embankment to establish or maintain the turf, or other similar activities.

C. Limitations

(1) The Board's receipt, comment, or approval of any design, construction, or modification does not relieve the dam's owner, consulting engineer, consulting geologist, contractor, equipment supplier, attorney, or any other party of any liabilities or responsibilities. Board and/or MDEQ approval of, or comment on, any document does not establish or convey any liability or responsibility to the Board and/or MDEQ, nor does such approval or comment represent any assurances that the project will comply with any authorization requirements or otherwise perform as intended by the owner, consulting engineer, consulting geologist, contractor, equipment supplier, attorney or other parties. The dam owner and/or any person responsible for constructing, enlarging, repairing, or altering a dam or reservoir shall comply with all conditions of the Board's authorization to construct and ensure that all construction, operation, and maintenance activities achieve such compliance. It is the responsibility of the dam owner/applicant to obtain all other approvals, permits, clearances, easements, and/or agreements for the construction and/or operation of the dam which may be required by federal, state, or local law or regulation.

(2) Permits issued by the Board expire one (1) year from the date of issuance if work has not commenced on the project. If the work cannot be commenced within the one-year period, the dam owner or any other person responsible for the project must request a time extension from the Board, in writing, at least thirty (30) days prior to the expiration of the one-year authorization period. The written request shall provide an explanation of project delays and an estimated construction commencement date. The Board will normally grant a time extension; unless the Board determines that circumstances surrounding the project have so changed that the construction and operation of the dam as originally proposed would violate state or federal laws or regulations. If the applicant allows the authorization to expire, a new application must be submitted and approved prior to the onset of construction.

(3) The hazard classification assigned to a dam by the Board is subject to change based on future developments that may increase the potential threat to life and property in the event of a dam failure. The dam owner and/or any person responsible for the construction and/or operation of a dam or reservoir assume all risks associated with designing and constructing the dam to meet less than the most stringent design criteria for high-hazard dams, including the risk of having to make modifications to the dam to meet future heightened

regulatory requirements associated with a change in classification.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, etseq.*

Rule 3.3 Application Content and Procedure.

A. Any person or entity proposing to construct, enlarge, repair, or alter a dam or reservoir shall submit either an application or a pre-construction notification (if the provisions of Rule 3.2 B. apply) to the Board, on forms prescribed by the Board, at least thirty (30) days prior to the anticipated commencement of construction. The submittal must have a United States Geologic Survey (USGS) topographic map, or portion thereof, attached to it showing the location of the proposed dam and reservoir including a clearly marked access route to the site and marked locations and general descriptions of all buildings, drainage structures or culverts, roads, railroads, bridges, and utility lines within two-miles downstream of the site of the proposed dam.

B. If the provisions of Rule 3.2. B. do not apply, or if the dam is classified as high or significant hazard as defined by these regulations, the application package also must include a complete set of design documents prepared in accordance with the following requirements:

(1) Engineering drawings, specifications, and engineering reports shall be prepared, signed, and sealed by a professional engineer. Engineering reports shall include, but not be limited to, hydrologic calculations, hydraulic calculations, geotechnical investigation, and provisions for internal drainage to address through-seepage and under-seepage. Portions of the investigation at the site of the dam and within the catchment area including, but not limited to, characterization of geologic formations, assessment of groundwater conditions, and/or other geologic conditions, factors, and processes which may impact the design of the dam may be performed by a professional geologist.

(2) Drawings shall be prepared to a scale that provides sufficient detail for review of all project components.

(3) Specifications shall include detailed descriptions of all work to be performed and materials to be used in the construction, including plans for diversion during construction and quality assurance and quality control.

(4) A geotechnical report showing the foundation conditions and material properties at the location of the dam as well as the classification and material properties of all borrow material must be submitted for the construction of all new high and significant hazard dams.

(5) For high and significant hazard dams a proposed construction schedule detailing the critical stages including but not limited to construction of the cutoff trench, spillways, and filters must be submitted prior to the commencement of

construction.

C. Application packages for a low hazard dam shall include, but not be limited to, a plan view of the dam (including all appurtenant works) and sections through the dam at the centerline of the principal spillway and at the centerline of the auxiliary (emergency) spillway.

D. The Board may require the applicant to supply any additional information necessary to evaluate an application, including the following:

(1) Whether the proposed dam will provide adequate safety for lives and property; and/or

(2) Whether the proposed dam will adversely affect riparian or other beneficial water uses, or plans for the proper utilization of the water resources of the state, and/or

(3) Any other information the Board deems appropriate.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.4 Permitting Requirements.

A. No materials shall be placed in a watercourse that will impede or block the natural flow of water without first obtaining a permit from the Permit Board and other appropriate federal, state, and local authorities. Additionally, any activity involving the discharge of dredged or fill material or any other construction in any state waters that are also subject to federal regulation under Section 404 of the 1972 Clean Water Act and/or Section 10 of the Rivers and Harbors Appropriation Act of 1899 shall be conducted in accordance with appropriate provisions of those federal statutes.

B. 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. No impoundment may be constructed that will adversely affect riparian or other beneficial water uses or plans for the proper utilization of state waters, or that will cause flooding of upstream property unless the owner of the proposed dam has legally acquired the right to do so.

C. Any dam that impounds a watercourse with a continuous flow shall be designed so that the established minimum flow for the stream (as established by the Commission) is maintained.

D. The owner and/or any person responsible for the construction, enlargement, repair, or alteration of a dam on a watercourse lying, in whole or in part, within a levee district duly constituted under the laws of the State of Mississippi, shall first obtain permission for the work from the board of the levee district and shall provide proof of such permission with

the application to the Board.

E. In addition to the general conditions contained herein, the Board may place special conditions on any authorization to construct or modify a dam.

F. A Surface Water Use Permit may also be required for any person to impound and store water behind a dam.

G. Within thirty (30) days after substantial completion of a high or significant hazard dam, the owner shall submit one complete set of as-built plans to the Board. The submittal also shall include a letter signed by the professional engineer responsible for the project, stating that the dam was constructed in accordance with the Board approved plans and specifications. For low hazard dams, the owner should submit a written notice of completion stating the dam was constructed in accordance with the approved application.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.5 Design and Maintenance Requirements.

A. Any modification, alteration, enlargement, or major repair of an existing dam, whether requested by the owner or directed by the Commission, will be subject to the current design standards for the appropriate hazard classification as set forth in this regulation.

B. High Hazard dams must be capable of safely passing the runoff from a 24 hour duration 100-year rainfall event through the principal spillway without activating the auxiliary (emergency) spillway. The 100- year rainfall event is established by the National Weather Service Atlas 14 and varies for different areas of the state. The runoff from one hundred percent (100%) of the 24 hour Probable Maximum Precipitation (PMP), as defined in Rule 3.1. of this regulation, must be passed through the principal and auxiliary (emergency) spillway and/or stored in the reservoir without overtopping the dam unless an incremental consequence analysis as defined in Rule 3.5 E. of this regulation indicates a lesser inflow design flood is applicable. The appropriate PMP for each county as obtained from NOAA HMR 51 and the hyetograph (Natural Resource Conservation Service Spillway Emergency Distribution) to be used in design routings are provided in Appendix A of this regulation.

C. Significant hazard dams must be capable of safely passing and /or storing the runoff from at least fifty percent (50%) of the 24 hour PMP without overtopping the dam unless an incremental consequence analysis as defined in Rule 3.5 E. of this regulation indicates a lesser inflow design flood is applicable. The owner and any other persons responsible for the construction and operation of the dam shall assume all risks for future costs to upgrade a dam in the event the hazard classification change.

D. Low hazard dams must be capable of safely passing and/or storing the runoff from either the 24 hour duration 100-year rainfall for the dam location according to NOAA Atlas 14 or thirty-five percent (35%) of the 24 hour PMP without overtopping the dam. The owner and any other persons responsible for the construction and operation of the dam shall assume all risks for future costs to upgrade a dam in the event the hazard classification changes.

E. An inflow design flood based on Incremental Consequence Analysis (ICA) may be developed and submitted to MDEQ. The analysis shall be conducted in accordance with *MDEQ Acceptable Procedures for Conducting an Incremental Consequence Analysis;* a copy of which may be obtained by contacting the MDEQ Dam Safety Division. MDEQ will review the ICA to determine whether the spillway design criteria for high and significant hazard dams, stated at Rule 3.5 B. and C. of these regulations, may be modified based on the ICA. The range of inflow design floods that can be considered as part of an ICA are as defined in the table below.

Hazard Classification	**ICA Inflow Design Flood**
High	50-100% PMP
Significant	500 year - 50% PMP

Any future changes in downstream land use, development, or critical hydraulic structures will require a re-evaluation of the incremental consequences and could require additional increases in spillway capacity for the dam. The owner and any other persons responsible for the operation of the dam shall assume all risks for future costs to upgrade a dam in the event there is a change in incremental consequences. Consequences shall be re-evaluated when changes occur but no less frequently than once every 5 years during a formal inspection of the dam.

F. When a conduit is proposed to be used in a high or significant hazard dam, the professional engineer responsible for the project shall provide MDEQ with detailed hydraulic, hydrologic, and structural computations supporting selection of the size and type of pipe to be used. Detailed drawings and specifications relating to the installation of the pipe shall include, but not be limited to, construction measures that adequately address critical loading, bedding, backfill, compaction, and seepage precautions related to installation of the pipe.

G. All concrete structures shall be designed in accordance with the applicable design standards in place at the time of construction. Details, as necessary, shall be provided showing reinforcement, cut offs, under drains/filters, waterstops, construction joints, control joints, and any other details necessary to construct.

H. The use of corrugated metal pipe for any purpose is expressly prohibited for high and significant hazard dams, because corrugated metal pipe typically experiences severe

corrosion and fails long before its expected design life.

I. The use of geotextiles in filters is expressly prohibited for high and significant hazard dams, because, geotextiles will plug with native soil material and make the filter inoperable.

J. The soils in an earthen auxiliary (emergency) spillway shall be capable of withstanding the water velocities generated when the auxiliary (emergency) spillway is activated without experiencing excessive erosion. In order to demonstrate this a SITES Stability and Integrity Analysis shall be performed for all new earthen spillways proposed for high and significant hazard dams as well as all existing high and significant hazard dam earthen spillways where major modifications are proposed to any part of the dam.

K. Side slopes of all dams shall be a minimum of three horizontal to one vertical (3:1).

L. Seepage and slope stability analysis may be required at the discretion of MDEQ.

M. Wave wash protection must be provided along the upstream face of the dam or engineering justification proving it is not necessary must be provided for the construction of all new high and significant hazard dams.

N. Owners of high hazard or significant hazard dams will be required to prohibit livestock grazing on the dam in order to prevent damage to the turf and to prevent erosion associated with establishment of animal trails.

O. Owners of earthen dams covered under this regulation shall establish and maintain a healthy turf on the exposed faces of the dam to prevent erosion, and shall mow frequently enough to prevent the encroachment of woody vegetation into the slopes of the dam embankment or within the prescribed limits (generally 50 feet from the toe) set by MDEQ.

P. Operation and Maintenance manuals may be required for high and significant hazard dams at the discretion of MDEQ.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, etseq.*

Rule 3.6 Inspections, Breach Analysis, and Emergency Action Plans.

A. The owner and the operator of a dam shall be responsible for the proper operation and maintenance as well as the structural integrity of the dam. In order to fulfill this responsibility, the owner and/or the operator should perform a visual inspection of the dam at least every sixty (60) days and after every major rainfall event over the watershed. Any significant deficiencies observed during such visual inspections shall be immediately reported to MDEQ.

B. The owner or operator of a high hazard or significant hazard dam shall have a detailed formal inspection of the dam performed by a registered professional engineer with experience in the design and construction of dams at such recurring intervals as may be directed by MDEQ. In addition, annual owner's inspections of the dam submitted by the owner may also be required. A checklist form prescribed and furnished by MDEQ shall be used to record observations during the inspection. Inspection reports shall be submitted to MDEQ no later than sixty (60) days after completion.

C. The owners or operators of high hazard or significant hazard dams shall maintain records and documents related to the original construction, recurring inspections, maintenance, repairs, and alterations of the dam for the life of the project. Such records shall be made available for inspection, or copies of such records furnished, upon request by MDEQ.

D. Dam breach analysis may be required by MDEQ to evaluate the hazard potential classification of a dam. For hazard classification purposes, the breach analysis is typically performed as a sunny day top of dam failure. MDEQ at its discretion may also require additional scenarios in certain circumstances.

The breach analysis shall extend downstream of the dam to a point where the depth of flooding outside the channel is no greater than 2 feet. All breach analysis models shall be digitally submitted to MDEQ.

E. The owner or operator of a high hazard dam shall develop an Emergency Action Plan (EAP) for the dam. MDEQ at its discretion may also direct the owner or operator of a significant hazard dam to develop an Emergency Action Plan (EAP). The EAP shall be submitted to MDEQ for approval. Once approved, a copy of the EAP will be maintained on file by MDEQ. The owner or operator of the dam shall review the EAP on an annual basis to assure that the information contained therein is current. Revisions to the EAP, as necessary, shall be furnished to MDEQ and all other persons involved in the implementation of the EAP. The owner or operator also shall be responsible for conducting or coordinating periodic training and exercises to assure that personnel involved in the implementation of the EAP are properly prepared to carry out their responsibilities in the event of an emergency.

F. MDEQ employees are authorized to make inspections at any time to evaluate the operation, maintenance, and structural integrity of dams and reservoirs. The owner or operator shall be required to perform, at the owner's or operator's expense, such work as may be necessary to correct deficiencies in maintenance and operation or accomplish necessary repairs identified by such inspections. If deficiencies are not corrected or repairs are not made as specified in the inspection report, the Commission may order owners or operators to take remedial action or remove the dam in order to safeguard lives and property.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.7 Confidential Information.

Procedures for declaring submitted information confidential and for agency handling of such information are found in Miss. Code Ann. Section 49-17-39, Section 51-3-44, and the Commission's Regulations Regarding the Review and Reproduction of Public Records (Title 11, Part 1, Chapter 2).

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.8 Compliance and Enforcement.

A. If MDEQ or the Commission determines that:

(1) A dam was constructed without obtaining required prior authorization from the Permit Board;

(2) A dam was not constructed in accordance with the plans and specifications upon which MDEQ based its authorization;

(3) The dam may not provide adequate safety for lives and property;

(4) The dam may adversely affect riparian or other beneficial water uses, or plans for the proper utilization of the water resources of the state; or

(5) The owner and/or operator of the dam has allowed the dam to deteriorate and remain in an unsafe condition after having been ordered to make the necessary repairs or modifications.

MDEQ or the Commission may:

(a) cause the dam to be removed or breached;

(b) require the owner and/or operator to take remedial action;

(c) revoke or modify any authorization pertaining thereto; or

(d) take other action the Commission deems appropriate, within its jurisdiction.

B. Enforcement of this regulation shall be governed by Miss. Code Ann. Sections 49-17-31, 49-17-33, 49-17-35, 49-17-37, 49-17-41, and Sections 51-3-49, 51-3-51, and 51-3-55.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.9 Correspondence and Adequacy of Notice.

A. General - All regulated dam owners shall inform MDEQ of any address changes, changes in ownership, or changes in the designated agent of the owner within fifteen (15) days of

any such changes, and must readily accept all mail sent to them from the Commission, MDEQ, or the Permit Board.

B. Registered or certified mail - Registered or Certified Mail sent with proper postage and to the last address provided to MDEQ by the dam owner of record shall be considered adequate notification of notice served if MDEQ is notified that the mail was delivered and accepted or if the mail is returned as rejected or unclaimed by the addressee.

C. Refusal to accept mail - Refusal to accept mail from the Commission, the Permit Board, the Department, or its designee, shall be considered a violation of this regulation.

Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

Rule 3.10 Hearings and Appeals.

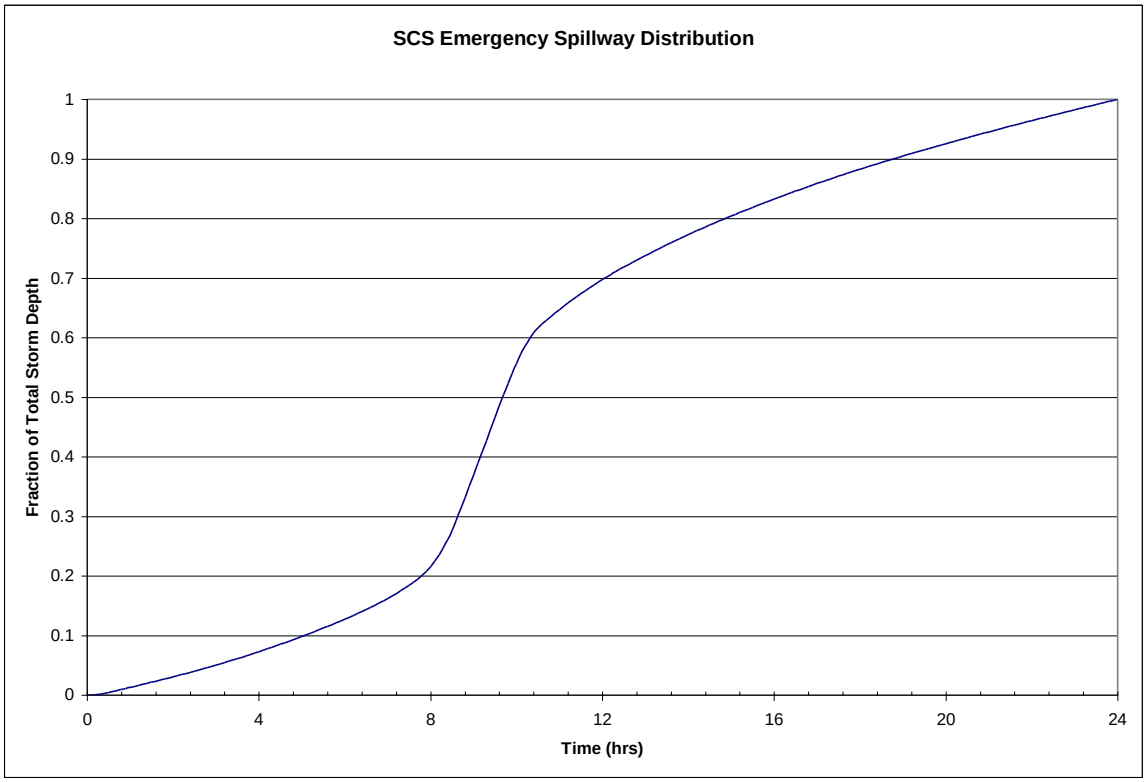
Any person aggrieved by any initial action of the Permit Board to issue, deny, transfer, modify or revoke a permit may request an evidentiary hearing before the Permit Board regarding the decision. Procedures for hearings and further appeals of Permit Board decisions are set forth in Mississippi Code Annotated Section 49-17-29.

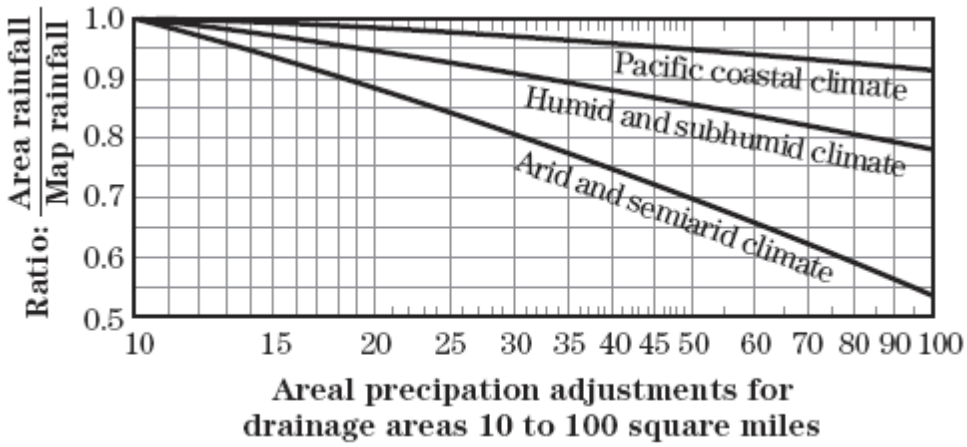
Source: Miss. Code Ann. *§§ 51-3-1, et seq., 49-2-1, et seq. and 49-17-1, et seq.*

APPENDIX A :

HYDROLOGIC DESIGN CRITERIA

PMP (24 hour duration) for MS Counties					
County	**PMP (in.)**	**County**	**PMP (in.)**	**County**	**PMP (in.)**
Adams	46.1	Itawamba	41.3	Perry	47.0
Alcorn	40.2	Jackson	47.8	Pike	46.9
Amite	46.7	Jasper	45.3	Pontotoc	41.5
Attala	43.4	Jefferson	45.7	Prentiss	40.7
Benton	40.4	Jeff Davis	46.1	Quitman	41.4
Bolivar	42.1	Jones	46.1	Rankin	44.8
Calhoun	42.0	Kemper	44.0	Scott	44.6
Carroll	42.8	Lafayette	41.2	Sharkey	43.6
Chickasaw	42.1	Lamar	46.8	Simpson	45.5
Choctaw	43.0	Lauderdale	44.6	Smith	45.3
Claiborne	45.3	Lawrence	46.2	Stone	47.6
Clarke	45.3	Leake	44.0	Sunflower	42.4
Clay	42.5	Lee	41.3	Tallahatchie	41.9
Coahoma	41.4	Leflore	42.6	Tate	40.7
Copiah	45.5	Lincoln	46.2	Tippah	40.4
Covington	46.1	Lowndes	42.8	Tishomingo	40.4
DeSoto	40.4	Madison	44.2	Tunica	40.7
Forrest	47.0	Marion	46.8	Union	41.0
Franklin	46.2	Marshall	40.5	Walthall	46.9
George	47.5	Monroe	42.1	Warren	44.6
Greene	46.9	Montgomery	42.7	Washington	43.0
Grenada	42.3	Neshoba	44.0	Wayne	46.0
Hancock	48.3	Newton	44.6	Webster	42.5
Harrison	48.0	Noxubee	43.4	Wilkinson	46.7
Hinds	44.7	Oktibbeha	42.8	Winston	43.4
Holmes	43.3	Panola	41.2	Yalobusha	41.8
Humphreys	43.3	Pearl River	47.6	Yazoo	43.8
Issaquena	43.8				





Areal precipation adjustments for drainage areas 10 to 100 square miles

Administrative Procedures Act Rules

Title 11: Mississippi Department of Environmental Quality

Part 7: Surface Water and Groundwater Use and Protection, Licensing of Water Well Contractors and Dam Safety Regulations

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Rule 4.1 Definitions.

In accordance with the definitions provided in Section 19 of H.B. 1730, passed and became law in Mississippi Regular Session of 2020, for the purposes of this chapter, the following terms shall have the meanings ascribed in this rule unless the context clearly indicates otherwise:

A. "Commission" means the Mississippi Commission on Environmental Quality.

B. "Department" or “MDEQ” means the Mississippi Department of Environmental Quality.

C. "High hazard dam" means a class of dam in which failure may cause loss of life, serious damage to residential, industrial, or commercial buildings; or damage to, or disruption of, important public utilities or transportation facilities such as major highways or railroads.

Source: *Section 19 of H.B. 1730, passed and became law in Mississippi Regular Session of 2020*

Rule 4.2 Mississippi Dam Safety Fund

A. Section 19 of H.B. 1730, Mississippi Regular Session of 2020, created in the State

Treasury a special fund to be designated as the "Mississippi Dam Safety Fund," which shall consist of funds made available by the Legislature in any manner and funds from any other source designated for deposit into such fund. Unexpended amounts remaining in the fund at the end of a fiscal year shall not lapse into the State General Fund, and any investment earnings or interest earned on amounts in the fund shall be deposited to the credit of the fund. Monies in the fund shall be used to make grants for the purposes provided hereafter.

B. Monies in the fund may be used to reimburse reasonable actual and necessary costs incurred by the department for the administration of the grant program. An accounting of actual costs incurred for which reimbursement is sought shall be maintained by the department. Reimbursement of reasonable actual and necessary costs shall not exceed three percent (3%) of the proceeds of bonds issued. Reimbursements shall satisfy any applicable federal tax law requirements.

Source: *Section 19 of H.B. 1730, passed and became law in Mississippi Regular Session of 2020*

Rule 4.3 Dam Safety Grant Program

A. The department hereby establishes a grant program to make grants to owners of high hazard dams to provide funds to be used for the purposes of draining, repairing, rehabilitating, breaching, or removing high hazard dams in this state as necessary to protect downstream lives and property.

B. In cases where a high hazard dam has been determined by the MDEQ Dam Safety Division as having deficiencies preventing the dam from being in compliance with high hazard standards, the owner of the dam may apply for a grant with the Department. An application for a grant shall be submitted at such time, be in such form, and contain such information as the department prescribes.

C. If the department approves the application, it may provide a grant to the applicant. A permit application will also be required as provided in Miss. Code Ann. Section 51-3-39 for any alteration of a dam. The permit application must include detailed plans for review and approval by the department before commencement of any alteration of a dam, including those modified with funds provided by a grant. The department will employ a risk based system for ranking high hazard dams to establish priority for funding, as provided in the following rule.

Source: *Section 19 of H.B. 1730, passed and became law in Mississippi Regular Session of 2020*

Rule 4.4 Risk-based system for use in ranking high hazard dams to establish priority

In its selection of projects to which award grants, subject to available funds, MDEQ shall rank and prioritize applications for Dam Safety Grants based on the potential to reduce risk to downstream lives and property in the event that the dam were to fail. Additional studies and information related to the condition of the dam will also be considered by MDEQ in ranking and prioritizing applications for Dam Safety Grants.

Source: *Section 19 of H.B. 1730, passed and became law in Mississippi Regular Session of 2020*

Rule 4.5 Grant agreements

A. Upon the department's approval of an application for a grant, the department shall enter into a project grant agreement with each grantee to establish the terms of the grant and the project, including the amount of the grant.

B. The grant funds shall be used by grantees to address deficiencies defined by the Dam Safety Division of the department and may not be used to perform routine operation or maintenance of a dam, to modify a dam to produce hydroelectric power, to increase water supply storage capacity, nor to make any other modification to a dam that does not also improve the safety of the dam.

C. Grant funds will be disbursed to the grantees of the Dam Safety Grant program as reimbursement of eligible program activities performed in accordance with the approved grant application. Requests for reimbursement shall be submitted timely and in such form, and contain such information, as the department prescribes.

D. Any assistance provided for a project shall be subject to a grantee cost-sharing requirement of not less than thirty-five percent (35%). The grantee share may be provided in the form of eligible in-kind contributions.

E. As part of a project grant agreement, a grantee must provide an assurance with respect to the dam to be rehabilitated under the project that the owner of the dam has developed and will commit to utilizing an Operation and Maintenance Plan for maintenance of the dam during the expected life of the dam. Dam owner grantees may be required to provide financial assurance to assure the continuing proper maintenance for the dam.

Source: *Section 19 of H.B. 1730, passed and became law in Mississippi Regular Session of 2020*