

**Mississippi Commission on Environmental Quality  
Regulation LW-2**

**SURFACE WATER AND GROUNDWATER USE AND PROTECTION**

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# REGULATION LW-2 SURFACE WATER AND GROUNDWATER USE AND PROTECTION

## I. 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 non-commercial 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 long-term viability of the aquifer as a source of water for existing and projected 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.

## **II. 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 Section II.H. – Emergency Authorizations, to exempted surface water diversions discussed in Section III.A., or to exempted groundwater withdrawals discussed in Section IV. 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.



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 requirement to re-apply prior to the expiration date of the permit.

- 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 paragraphs II.G.1.a. and b. above, or written notification of any proposed change in permit parameters as described in paragraph II.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:
  - i. 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.
  - ii. 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.
  - iii. 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.



**III. Surface Water Diversions** — All surface water diversions must meet the permitting requirements set forth in Section II., 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:
      - i) The landowner/applicant presents a study showing the potential effects of the proposed use on the watercourse; and
      - ii) 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:
      - i) 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

- ii) 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:
  - i) 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
  - ii) Places metering devices on both the intake and discharge devices to measure flow rates of water; and
  - iii) 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.

**IV. Groundwater Withdrawals** – All groundwater withdrawals must meet the permitting requirements set forth in Section II., 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 Section IV.D. and reporting requirements specified in Section IV.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.

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 <sup>2</sup> /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

(ft<sup>2</sup>/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:

- The drainage area providing surface water run-off to the impoundment;
- The permeability of the soils that form the bottom of the impoundment;
- The volume of water required to fill the impoundment;
- The rate of groundwater withdrawal estimated to be required to maintain the level of water in the impoundment at the designed normal pool;
- The potential impacts of the requested groundwater withdrawal on the local availability of groundwater for higher priority uses, as specified in these regulations.

4. Reduction of public water infrastructure costs in the public interest - Miss. Code Ann. Section 51-3-13 states that if a proposed use of water sought to be permitted is detrimental to the public interest, then it shall be the duty of the Permit Board to reject such application or require its modification.

The public interest, and what may constitute a detriment thereto, is reflected in legislative findings stated in the Mississippi Code. Miss. Code Ann. Section 49-17-703 states legislative findings including the finding that there is a need for consolidation of water services in order to reduce costs, promote resilience in the event of a disaster, improve the quality of the natural environment, and improve the planning and delivery of water within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, and Stone.

Therefore, where consolidation of water supply by and between separate utilities, both of which are owned or operated by a government agency, instrumentality, district, county, municipality, or cooperative (“publicly owned”), would reduce costs to the public, it is in the best interest of the public that such consolidation be required. Accordingly, the Permit Board may reject an application for proposed water withdrawal from a publicly owned utility (or require its modification) as detrimental to the public interest in circumstances where consolidation between publicly owned utilities would be less costly to the public than the proposed water withdrawal within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, and Stone.

Furthermore, in circumstances where consolidation of water supply by and between publicly owned utilities would reduce costs to the public within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, and Stone, such consolidation may be required by Order of the Commission, and the Commission delegates the authority to issue such Order to the Executive Director of the Mississippi Department of Environmental Quality.

As a part of the application process, the Permit Board may require such specific documentation and information as is necessary to make cost comparisons.

5. 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;
  - e.** Drill cuttings (If available)
  - f.** Pump test information. (If available); \*
  - g.** 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, unless the replacement well is located within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, or Stone. 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 Paragraph IV.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 paragraph IV.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 subpart H. 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.

### **V. 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 (MCEQ-2).

### **VI. 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.

### **VII. 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.

**Mississippi Commission on Environmental Quality  
Regulation LW-2**

**SURFACE WATER AND GROUNDWATER USE AND PROTECTION**

Adopted by the Commission on Environmental Quality

June 24, 2004

Amended by the Commission on Environmental Quality

January 26, 2006

Amended by the Commission on Environmental Quality

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# REGULATION LW-2 SURFACE WATER AND GROUNDWATER USE AND PROTECTION

## I. 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 non-commercial 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 long-term viability of the aquifer as a source of water for existing and projected 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.

## **II. 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 Section II.H. – Emergency Authorizations, to exempted surface water diversions discussed in Section III.A., or to exempted groundwater withdrawals discussed in Section IV. 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.





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 requirement to re-apply prior to the expiration date of the permit.

- 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 paragraphs II.G.1.a. and b. above, or written notification of any proposed change in permit parameters as described in paragraph II.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:
  - i. 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.
  - ii. 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.
  - iii. 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.

**III. Surface Water Diversions** — All surface water diversions must meet the permitting requirements set forth in Section II., 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:
      - i) The landowner/applicant presents a study showing the potential effects of the proposed use on the watercourse; and
      - ii) 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:
      - i) 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

- ii) 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:
  - i) 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
  - ii) Places metering devices on both the intake and discharge devices to measure flow rates of water; and
  - iii) 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.

**IV. Groundwater Withdrawals** – All groundwater withdrawals must meet the permitting requirements set forth in Section II., 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 Section IV.D. and reporting requirements specified in Section IV.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.

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 <sup>2</sup> /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

(ft<sup>2</sup>/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:

- The drainage area providing surface water run-off to the impoundment;
- The permeability of the soils that form the bottom of the impoundment;
- The volume of water required to fill the impoundment;
- The rate of groundwater withdrawal estimated to be required to maintain the level of water in the impoundment at the designed normal pool;
- The potential impacts of the requested groundwater withdrawal on the local availability of groundwater for higher priority uses, as specified in these regulations.

4. Reduction of public water infrastructure costs in the public interest - Miss. Code Ann. Section 51-3-13 states that if a proposed use of water sought to be permitted is detrimental to the public interest, then it shall be the duty of the Permit Board to reject such application or require its modification.

The public interest, and what may constitute a detriment thereto, is reflected in legislative findings stated in the Mississippi Code. Miss. Code Ann. Section 49-17-703 states legislative findings including the finding that there is a need for consolidation of water services in order to reduce costs, promote resilience in the event of a disaster, improve the quality of the natural environment, and improve the planning and delivery of water within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, and Stone.

Therefore, where consolidation of water supply by and between separate utilities, both of which are owned or operated by a government agency, instrumentality, district, county, municipality, or cooperative (“publicly owned”), would reduce costs to the public, it is in the best interest of the public that such consolidation be required. Accordingly, the Permit Board may reject an application for proposed water withdrawal from a publicly owned utility (or require its modification) as detrimental to the public interest in circumstances where consolidation between publicly owned utilities would be less costly to the public than the proposed water withdrawal within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, and Stone.

Furthermore, in circumstances where consolidation of water supply by and between publicly owned utilities would reduce costs to the public within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, and Stone, such consolidation may be required by Order of the Commission, and the Commission delegates the authority to issue such Order to the Executive Director of the Mississippi Department of Environmental Quality.

As a part of the application process, the Permit Board may require such specific documentation and information as is necessary to make cost comparisons.

4-5. 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;
  - e.** Drill cuttings (If available)
  - f.** Pump test information. (If available); \*
  - g.** 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, unless the replacement well is located within the areas of the counties of George, Hancock, Harrison, Jackson, Pearl River, or Stone. 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 Paragraph IV.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 paragraph IV.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 subpart H. 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.

### **V. 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 (MCEQ-2).

### **VI. 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.

### **VII. 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.