RULES AND REGULATIONS GOVERNING GEOPHYSICAL, SEISMIC OR OTHER TYPE EXPLORATION ON STATE-OWNED LANDS OTHER THAN STATE-OWNED MARINE WATERS

The following rules and regulations, promulgated under the authority of Sections 29-7-1 et seq., Mississippi Code Annotated (1972), as amended, shall apply to all geophysical, seismic or other type exploration work, for oil and gas purposes, on all state-owned lands and minerals under the jurisdiction of the Mississippi Major Economic Impact Authority (MMEIA). Should any rule or regulation, or part thereof, be declared unconstitutional or illegal, it shall not affect the remaining regulations.

RULE 1. DEFINITIONS

For the purposes of these rules and regulations, the following terms shall have the meanings respectively ascribed to them except where content or subject matter otherwise dictates:

A. Applicant - A field exploration party and the person, company or companies contracting for an exploration permit

B. Appropriate supervisory agency - The agency that is given the authority to supervise the area for which a seismic permit is requested (The Commission on Wildlife, Fisheries and Parks shall be the appropriate supervisory agency for the land and areas under its jurisdiction.)

C. Coastal wetlands permit - Refers to the permits issued by the Department of Marine Resources and the Commission on Marine Resources as authorized by MCA 49-27-9 and the Mississippi Coastal Program

D. DMR - Mississippi Department of Marine Resources

E. Energy source points - The geographical location of the energy source

F. Energy source - Explosives, vibrators, weight droppings, confined explosive gases, air guns, implosives, electrical sparkers, active transducer, radio frequency transmitters, or other energy source

G. Executive Director - Unless otherwise indicated, means the executive director of the MMEIA, or his designee

H. Exploration - Geological, geophysical, geochemical and other surveys and investigations, including seismic methods, for the discovery and location of oil, gas or other mineral prospects, which may or may not involve the use of explosives

I. Explosive source - Dynamite, nitramon, primacord, seismex, penolite, seismogel, or any chemical (solid, liquid or gas) that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature
J. **Geochemical exploration** - A survey or investigation conducted to discover or locate oil and gas prospects by means of soil sampling, analysis, or other accepted techniques

K. **Geophysical crew** - The geophysical crew is composed of all personnel and equipment required to accomplish the geophysical work in the field. This includes the survey party, a driller licensed under the provisions of Regulation LW-3 administered by the Mississippi Department of Environmental Quality, drilling personnel, and geophysical instruments personnel.

L. **Geophysical exploration** - Any operation conducted to discover or develop mineral resources upon lands owned by the State of Mississippi and under the jurisdiction of the MMEIA or other relevant agencies, which utilizes geophysical techniques, including, but not limited to gravity, magnetic, and various seismic methods, to produce information and data in support of possible exploration and development activity

M. **Geophysical survey period** - That period of time when the geophysical crew is actually performing work in the permitted area

N. **IAGC** - The International Association of Geophysical Contractors

O. **MDA** - The Mississippi Development Authority

P. **MMEIA** - The Mississippi Major Economic Impact Authority, which is a division within the MDA

Q. **Party chief** - The person(s) in charge of the field exploration party

R. **Permit** - The written authorization, other than a lease, approved for a specified period under which a permittee acquires the right to conduct geological or geophysical exploration for mineral resources

S. **Permittee** - Person(s) granted authority to perform certain functions, awarded pursuant to Section 29-7-3 of the Mississippi Code (1972) Annotated, as amended

T. **Proprietary/confidential information** - This is trade secrets and confidential information of a proprietary nature. Only persons authorized by the executive director of MMEIA may access this information.

U. **Receiver lines** - A linear array of points where the instruments (geophones/hydrophones) used to transform seismic energy into an electrical voltage are located

V. **Receiver points** - A specific geographical location on a receiver line where the instruments are placed
W. **Seismic agent** - A person recognized as having the requisite training or experience to monitor geophysical explorations and approved by the appropriate supervisory agency

X. **Seismic exploration** - Any geophysical exploration that uses outside energy sources

Y. **Shot** - Any action resulting in the generation of an energy pulse from which geophysical data is obtained

Z. **Shot-point line(s)** - Plan of location of the energy sources

AA. **Source lines** - A linear array of energy source points

BB. **Onshore State-Owned Lands** - All lands and water bottoms owned by the State and administered by MMEIA that lie above the mean high tide and are not influenced by the tides of the Gulf of Mexico. University and 16th section lands are not administered by the MMEIA.

CC. **State-owned waters** - All waters and submerged lands owned by the State of Mississippi

DD. **State-owned marine waters** - All waters and submerged lands owned by the State of Mississippi, subject to the ebb and flow of the tide, which are below the watermark of mean high tide; all publicly owned accretions above the watermark of mean high tide, and all publicly owned submerged water-bottoms below the water mark of mean high tide

**RULE 2. PERMIT REQUIREMENT**

Geophysical exploration in, on, under or that affects state-owned land within the jurisdiction of the MMEIA are prohibited except where authorized by permit, as hereinafter provided.

**RULE 3. APPLICATION FOR GEOPHYSICAL PERMIT**

A. Applications for permits to conduct geophysical exploration shall be submitted to the MMEIA Mineral Lease, Post Office Box 849, Jackson, Mississippi 39205-0849.

B. Applications for permits shall be submitted on official forms provided by the MMEIA. However, the MMEIA may elect to waive this requirement for applications submitted in a form substantially equivalent to the format of the official form.

1. Applications must show:

   (a) The name and address of the company or individual for whom the geophysical operations are to be performed.
(b) The name and address of the firm or individual actually performing the work. The name and the Mississippi drillers license number of the driller in charge of the drilling operation. For foreign corporations, include whether or not the corporation has qualified to do business in Mississippi and the name and address of the registered agent.

(c) Energy sources.

(d) Size of charges, if explosives are to be used, and the depth below the surface charges will be placed.

(e) Distance between energy source points, source lines, receiver points, and receiver lines.

(f) Proposed dates for beginning and ending geophysical exploration.

(g) Linear miles covered by 2-D seismic coverage or square miles covered by 3-D coverage on State-owned mineral acreage.

C. Applications for geophysical permits must be accompanied by two (2) maps or plats with the preplotted survey line or lines depicted for seismic exploration in full, thereon. A GIS equivalent in an acceptable format may be substituted if approved beforehand. Proposed line location plats submitted with a permit application shall be held confidential until such time as a permit receives final approval or denial, at which time all information will become public record.

RULE 4. FILING AND PERMIT FEE

A. Applications for geophysical permits shall be accompanied by a filing fee, in the form of a cashier's check, certified check, bank money order, or company check, payable to the MMEIA Mineral Lease.

B. The filing fee for geophysical surveys shall be Two Hundred Dollars ($200). There will be an additional survey permit fee, payable to MMEIA prior to commencement of field acquisition, of One Hundred Dollars ($100) per shot hole for 2-D surveys. For 3-D surveys, the permit fee shall be $10 per acre of recorded acreage.

C. In cases where state-owned lands are under the supervision of State agencies other than the MMEIA, MMEIA will disburse the permit fee to the appropriate supervisory agency.

D. If the application for a geophysical permit is denied, the filing fee shall be returned to the applicant within ten (10) days of the denial. If an application for a permit is denied, an order of denial shall be entered on the minutes of the MMEIA.

E. In order to maintain permission to operate, an applicant/permittee shall furnish the MMEIA a surety bond in the amount of Seventy-Five Thousand Dollars ($75,000) from a bonding company licensed to do business in the State of Mississippi.
RULE 5. PERMIT ISSUANCE AND TRANSFER

A. Permits shall be issued to the person, firm, or firms actually conducting the survey operations.

B. Transfer or assignment of any geophysical permit shall be prohibited, except by written application made to and approved by the Executive Director.

F. Permit to operate shall be valid for the period approved from the date of approval, unless otherwise specified. Permits may be renewed for not more than two (2) additional ninety-day (90) periods by written application to, and at the discretion of, the Executive Director. Applications for permit renewals shall be made by letter to the Executive Director.

RULE 6. PRE-FIELD OPERATIONS

A. Prior to the start of actual field operations under any permit, notice shall be given to the Executive Director of MMEIA of the date and place of commencement of the exploration at least ten (10) business days prior to the commencement of the activity. Notice may be given by telephone or e-mail, but must be confirmed by letter.

B. Prior to commencement of geophysical exploration upon any wildlife refuge, wildlife management area, game or fish preserve, state park, coastal preserves system, or other similar state or federal lands, the minerals under which may be subject to being leased by the MMEIA, the managing agency responsible for the area shall be given at least ten (10) business days notice regarding the proposed operations. In the event of circumstances not conducive to testing, the managing agency may request the Executive Director to delay the commencement of field operations until conditions are more favorable. Any delay of operations imposed on the permit under this paragraph shall not count against the permit period.

RULE 7. FIELD OPERATIONS

A. Explosive Use

1. Explosive charges larger than twenty (20) pounds and multiple charges in one shot having an aggregate weight in excess of twenty (20) pounds shall not be used without special permission from the Executive Director.
2. For geophysical exploration on state-owned lands, minimum shot hole depths shall be as follows for the sizes of charge shown:

<table>
<thead>
<tr>
<th>Weight of Charge</th>
<th>Minimum Required Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>One pound or less</td>
<td>10 to 25 feet</td>
</tr>
<tr>
<td>Within 10 to 25 feet of the surface, only charges of 1 pound or less may be used. In addition, the hole must be tamped before shooting. No charges above 10 feet.</td>
<td></td>
</tr>
<tr>
<td>Between 1 pound up to 2 pounds</td>
<td>25 feet</td>
</tr>
<tr>
<td>More than 2 pounds up to 5 pounds</td>
<td>40 feet</td>
</tr>
<tr>
<td>More than 5 pounds up to 20 pounds</td>
<td>60 feet</td>
</tr>
<tr>
<td>More than 20 pounds up to 30 pounds-(with permission)</td>
<td>70 feet</td>
</tr>
<tr>
<td>More than 30 pounds up to 40 pounds-(with permission)</td>
<td>100 feet</td>
</tr>
<tr>
<td>More than 40 pounds up to 50 pounds-(with permission)</td>
<td>120 feet</td>
</tr>
</tbody>
</table>

No part of the charge shall be above minimum required depth.

3. The entire charge shall be placed below the minimum required depth.

4. No explosive charges shall be allowed on or above any submerged water bottoms.

5. The minimum required depths prescribed above shall not apply to trial charges or charges for determining the condition of the weathering layer; provided that such charges shall not exceed five (5) pounds, shall not be fired unless absolutely necessary, and shall be included in the issued permit.

B. All drilling operations must be performed by or under the supervision of a driller licensed by the Mississippi Department of Environmental Quality. During operations in water, piping shall not be left protruding above the water bottom and shall be removed below the mud-line.

C. Upon completion of the geophysical exploration, all pipe, whether used for charge placement or otherwise, shall be removed to a depth of at least six (6) feet below the surface of the ground or water bottom.

D. All markers and stakes used to mark survey lines, and each joint of pipe used in water operations, shall have the name of the company or person conducting the survey indicated thereon. Such markers, stakes, and pipe shall be completely removed upon completion of the survey.

E. Geophysical exploration in water shall conform to rules as set forth by the U. S. Army Corps of Engineers and the U. S. Coast Guard.

F. No explosives shall be discharged within one thousand (1,000) feet of any boat, other than the operator’s boat or boats, without notice being given to such other boat in order that it may move from the area.
G. No explosive shall be discharged within five hundred (500) feet of any dredged channel, or within three hundred (300) feet of any dock, pier, causeway or other structure.

H. All holes shall be abandoned in accordance with Regulation LW-3 of the Mississippi Department of Environmental Quality, Office of Land and Water Resources. Upon completion of the survey, the area around all holes and along all survey lines shall be restored, as nearly as practicable, to original conditions. The project area will be free of all project related trash and debris.

I. Payment and acceptance of the fees and survey charges required by Rule 4 hereinabove shall not relieve permittee of any liability for damage to roads, fences, timber, wildlife habitat, camping areas, water wells and structures. Any and all damage caused by the geophysical exploration shall be repaired within three (3) months after completion of the field operations unless authorized by the MMEIA.

J. To minimize damage to the land, existing roadways, rights of way, and clearings will be used, where possible, when conducting geophysical exploration. Any physical modification of the surface including, but not limited to, mounding, cratering, or vehicle tracks shall be remedied upon completion of the work.

K. Geophysical exploration for mineral resources shall be conducted so that those activities do not:

1. Unreasonably interfere with or endanger operations under any lease;

2. Cause harm or damage to aquatic life;

3. Cause pollution;

4. Create hazardous or unsafe conditions;

5. Unreasonably interfere with or harm other uses of the area; or

6. Disturb cultural resources.

L. Geophysical crews operating on state-owned lands shall have the following items in their possession and available for inspection at the permittee's field office:

1. A copy of the seismic permit including conditions

2. A copy of these rules and regulations

3. A detailed map showing the survey line locations and shot points
RULE 8. SEISMIC AGENTS

A. Each geophysical crew working under permit issued pursuant to these regulations shall be accompanied at all times by a seismic agent, unless written exception has been granted by the MMEIA and the Executive Director of the appropriate supervisory agency or his/her designee. When more than one geophysical crew is utilized and the geophysical crews are so separated that it is not feasible for one seismic agent to observe the operations of both, a separate agent shall be assigned to each geophysical crew. A qualified seismic agent shall not have an existing financial affiliation with the survey company conducting the field survey or the company(ies) sponsoring the work.

B. At the close of each day, whether or not any actual testing has been conducted, the seismic agent shall file with the appropriate supervisory agency, a full report of the day's exploration activities. These reports shall be completed on forms provided by the appropriate supervisory agency and signed by both the party chief and the seismic agent. Weekly summaries will be sent to the MMEIA whether a seismic agent is required or not required.

C. The party chief shall furnish the seismic agent the information to fill out daily reports of exploration activities. This information can be submitted in person, email, or fax. Should the MMEIA or the appropriate supervisory agency wish to secure any other information, it will furnish the party chief with a written request.

D. A fee of Two Hundred Fifty Dollars ($250) per day shall be paid to the appropriate supervisory agency by the geophysical operators while the seismic agent is daily accompanying the geophysical crew.

E. All payments for the services of seismic agents shall be made by the geophysical exploration companies directly to the appropriate supervisory agency on or before the 15th day of each month for the previous month’s services. No payments may be made by the operators to the seismic agents.

F. Seismic agents shall have the right to stop any operations, which, in their opinion, are violating or may violate any of the rules and regulations set forth herein, but they shall not have the authority unilaterally to terminate the entire exploration work. If, in the opinion of the seismic agent, such violations continue, the seismic agent shall immediately communicate this to the MMEIA and the appropriate supervisory agency for possible enforcement action.

G. The party chief shall notify the appropriate supervisory agency daily if the assigned seismic agent is not present on the job. The seismic agent's absence shall not be cause for suspension of the geophysical exploration.

H. Seismic agents shall have no right to release or exempt any operator from the obligations imposed by these rules and regulations.
I. Exceptions to these rules regarding seismic agents may be granted by the joint approval of MMEIA and the appropriate supervisory agency upon written application with supporting justification. Any variance to or exception from these rules granted by MMEIA and the appropriate supervisory agency shall specify the particular rule involved and the procedure to be followed in lieu thereof.

J. Seismic operators shall notify the appropriate supervisory agency of the beginning, interruption and cessation of work in any area and shall keep the MMEIA and the appropriate supervisory agency informed of the name and address of the party chief and the location and movements of the crew.

**RULE 9. REPORTING REQUIREMENTS**

A. Within thirty (30) days after the expiration of a permit or completion of the work to be performed thereunder, whichever comes first, the permittee shall file a report or field log with the MMEIA and the appropriate supervisory agency showing the dates on which field operations were conducted, and whether or not shot holes or survey lines additional to those covered by the permit were actually included in the field work. Reports related to drilling and decommissioning boreholes must be submitted to the Mississippi Department of Environmental Quality in accordance with Regulation LW-3.

B. Within thirty (30) days after the expiration of a permit or completion of the work to be performed thereunder, whichever comes first, the permittee shall file a report with the MMEIA and the appropriate supervisory agency detailing any and all damage to the natural environment and man-made structures including the location and extent of the damage, the remediation activities performed, and the owner of the property where the damage occurred.

C. Any person conducting geological or geophysical activities for mineral exploration pursuant hereto in state-owned wetlands shall immediately report to the MMEIA and the appropriate supervisory agency when these activities:

1. Encounter environmental hazards which constitute an eminent threat to human activity or the natural environment; or

2. Adversely affect the environment, aquatic life, cultural resources, or other uses of the area in which the exploration activity is conducted.

**RULE 10. PROTECTION OF WILDLIFE MANAGEMENT AREAS**

Seismic companies conducting exploratory work on state-owned land in Wildlife Management Areas under the administration of the Department of Wildlife, Fisheries, and Parks may be required to post a bond in an amount to be determined with the Department of Wildlife, Fisheries, and Parks prior to the issuance of a seismic permit. Any company that fails to comply with the foregoing rules and regulations or the seismic permit shall be declared by the Department of Wildlife, Fisheries, and Parks to be in violation and as a result the company shall
forfeit the bond. Should the company default, the bond shall be expended to reclaim the lands with respect to which the bond was filed.

A. All pipe used in geophysical operations must be removed to at least six (6) feet below the bottom in water areas before finally abandoning the shot point. No pipes shall remain in the water during crew off days except as otherwise provided herein.

B. All parties using pipe in water areas must have clearly stamped at each end of each joint, the name or abbreviation of the name, of the company using the pipe. All equipment including cables, boxes, geophones, staff poles, anchors, buoys, etc., must be permanently tagged with the name of the permittee. All stakes or markers used for survey lines must be clearly stamped and visible with the name of the permittee using the stakes. These stakes must be immediately removed upon completion of the project. All cane poles must be removed immediately upon completion of the project. Anchors shall be marked, stamped, or tagged to identify the permittee who deployed them, and shall be secured to an appropriately marked buoy, vessel or float.

C. All pipes, buoys and other markers used in connection with exploration activities in water areas shall be flagged properly during daylight hours. Flagging shall be clearly visible from the adjacent buoy or marker. During the hours of darkness, pipes, buoys and other markers shall be lighted in accordance with U. S. Coast Guard navigation rules.

D. Boats, marsh buggies or other types of marsh vehicles used in connection with exploration activities must be so used as to cause minimum disturbance or injury to the lands, water bottoms and wildlife and fisheries thereon.

E. Permittees conducting seismic operations shall use reasonable precaution in accordance with approved and accepted methods to prevent destruction of, or injury to freshwater fish, other aquatic life, wildlife or other natural resources of the State.

F. No geophysical exploration activity shall be conducted in any wildlife refuge, waterfowl refuge, game preserve, fish preserve or hatchery without written permission from the agency in charge of such refuge, preserve, or hatchery.

G. The Executive Director of the MMEIA may suspend or temporarily prohibit the permittee's authority to conduct exploration under a permit either orally or in writing when it is determined that the permittee fails to comply with the provisions of the permit or of these regulations, or otherwise damages or may damage State lands. Such suspension shall be effective immediately upon receipt of the notice. Suspensions issued orally shall be followed by written notice confirming the action and all written notices shall be sent by certified mail. A suspension shall remain in effect until the basis for the suspension has been corrected to the satisfaction of the MMEIA and the appropriate supervisory agency.

H. Failure to comply with these regulations shall result in the forfeiture of applicable bonds and other appropriate enforcement action by the State of Mississippi.
RULE 11. ACCESS TO DATA

A. All information or data obtained in any mineral exploration activity on any and all State lands shall be disclosed to the State, through the MMEIA, upon demand. Also the State shall have the option to review this data at the office where the data is located. Said data shall include all final processed data. If the MMEIA elects to have possession of seismic data, such information or data shall be treated as confidential for a period as allowed by law, from the date of receipt thereof and shall not be disclosed to the public or to any firm, individual or agency other than officials or authorized employees of this State. Any person who makes unauthorized disclosure of such confidential information or data shall be guilty of a misdemeanor and, upon conviction thereof, may be fined as provided by law or imprisoned in the county jail not more than one (1) year or both.

B. Designation of authorized persons to access data - The official charged with security and safeguarding proprietary data is the Executive Director of the MMEIA, who is authorized to establish and direct appropriate security measures. The Executive Director of the MMEIA will designate two (2) additional persons to share the responsibility of securing proprietary data. No one will be allowed access without written approval of a minimum of two (2) of the three authorized persons specified above.

RULE 12. LIABILITY COVERAGE

A. Persons actually conducting geophysical exploration shall be required, as a condition precedent to obtaining a permit, to furnish proof of general comprehensive liability insurance coverage for all operations under the permit, subject to approval of the Executive Director of the MMEIA, by an insurance carrier authorized to do business in the State of Mississippi. In obtaining a permit to conduct exploratory work, the applicant by such application will agree to indemnify the State for any and all damages that may occur because of such exploratory operation on State lands which may be committed or caused by the applicant's operation and further that the applicant will hold the State harmless from any and all damages which may occur from the applicant's operation while on State land.

RULE 13. VIOLATIONS

A. Any violation of these rules, any violation of a condition of a permit issued pursuant hereto, any refusal of any permittee, operator, or employee thereof to fully comply with rules or the directives of the MMEIA, or the appropriate supervisory agency or its seismic agent, and any attempt to induce or coerce any seismic agent or state employee in the enforcement of these regulations shall constitute peremptory cause for revocation of any permit issued hereunder.

B. Geological and geophysical exploration for mineral resources may not be commenced nor conducted upon State lands under the jurisdiction of the MMEIA without an approved permit from the Executive Director of the MMEIA. Conducting any geophysical exploration without a permit issued pursuant to these regulations, or
continued operations after revocation of any permit, shall be deemed to be a trespass upon property of the State of Mississippi, and actionable as such.

C. Flagrant or repeated violation of these rules and regulations may constitute cause for the refusal of the applicant involved to conduct future operations in this State.

D. The issuance to the permittee of a permit to conduct geophysical exploration does not relieve the permittee of the responsibility to obtain additional authorizations from other local, state, and federal entities.