

Environmental Regulations Associated with Hydraulic Fracturing Activities

Mississippi Department of Environmental Quality

2018

This fact sheet has been developed to help drilling companies better understand Mississippi environmental regulatory requirements administered through MDEQ. It does not include regulatory requirements administered by any other state or federal agency. It should not be your only source of information on the regulations or replace seeking assistance from experienced consultants and/or legal counsel.

Water Sourcing

The Office of Land and Water Resources Permitting, Certification and Compliance Division is responsible for regulating the use of surface water and groundwater in hydraulic fracturing. The surface water and groundwater use regulations (11 Miss. Admin. Code Pt. 7 Ch. 1.) require that any person or entity proposing to use surface water or groundwater in the state of Mississippi must notify MDEQ and may be required to obtain written authorization and/or a permit.

Surface Water Withdrawal Considerations:

1. A *Permit Application to Divert or Withdraw Surface Water for Hydraulic Fracturing* should be made at least two months prior to the desired date for withdrawing surface water. The application and a \$10.00 permit fee should be submitted to MDEQ for all surface water sources.
2. MDEQ will determine if the source is considered state waters or will impact state waters. If so, MDEQ will determine an estimated allowable flow rate based on historic averages and prepare a Notice of Intent to Withdraw Surface Water to be published in a paper with circulation in the project county. It is the responsibility of the applicant to ensure publication. The Notice of Intent has to be published for one day, which begins a ten-day public comment period.
3. A permit is not issued until the applicant submits a notarized proof of publication to MDEQ, the ten-day comment period is completed, and comments, if any, are considered.

4. Every permit contains Special Terms and Conditions as part of the permit. It is the responsibility of the applicant to ensure compliance with the Special Terms and Conditions.
5. At least three days prior to withdrawal MDEQ must be notified withdrawal is about to begin. A final determination on allowable flow rate will be determined by MDEQ based on actual flow rate at the time of withdrawal.
6. Within three days after ceasing withdrawal, a report must be sent to MDEQ specifying the dates of withdrawal, rate of withdrawal and total volume withdrawn.

Groundwater Withdrawal Considerations:

1. A *Groundwater Withdrawal Permit Application* should be made at least two months prior to the desired date for withdrawing groundwater for the use of hydraulic fracturing. The application and a \$10.00 fee should be sent to MDEQ. A separate application and fee is required for each well.
2. MDEQ will prepare a Notice of Intent to Withdraw Groundwater to be published in a paper with circulation in the project county. It is the responsibility of the applicant to ensure publication. The Notice of Intent must be published for one day, which begins a ten-day public comment period.
3. A permit is not issued until the applicant submits a notarized proof of publication to MDEQ, the ten-day comment period is completed, and comments, if any, are considered.
4. Every permit contains Special Terms and Conditions as part of the permit. It is the responsibility of the applicant to ensure compliance with the Special Terms and Conditions.
5. When the well is no longer needed it must be properly plugged and a Decommissioning Form must be provided to MDEQ.

NOTE: Do not assume an existing permitted groundwater well may be used for hydraulic fracturing purposes, and do not pump any existing well without contacting MDEQ. Unless a groundwater well permit specifically lists hydraulic fracturing as an approved beneficial use, the permit must be modified, which includes a ten-day public notice comment period.

All new or existing groundwater wells will be evaluated to ensure no significant impacts will occur to existing drinking water supplies due to hydraulic fracturing.

Permit application, additional information and a copy of the regulations, can be obtained here:

<https://www.mdeq.ms.gov/permits/water-availability-and-use/forms/>

For additional information, please contact:
Chris Hawkins, P.E., Chief
Permitting, Certification, and Compliance Division
(601) 961-5775
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Dam Safety

The Office of Land and Water Resources Dam Safety Division is responsible for regulating dams in order to protect downstream lives and property. The Dam Safety Regulations (11 Miss. Admin. Code Pt. 7, Ch. 3.) require that any person or entity proposing to construct, enlarge, repair or alter a dam or reservoir in the state of Mississippi notify MDEQ prior to commencement of any site work. Prior written authorization and/or permit may also be required except as exempted under 11 Miss. Admin. Code Pt. 7, Ch. 3. Rule 3.2(b).

Dam Safety Considerations:

1. The *Dam Construction and Surface Water Impoundment Permit Application* should be made at least one month prior to construction and sent to MDEQ. Depending on the circumstances, a \$10.00 permit fee for a surface water impoundment permit and public notice may be required.
2. The application must include a USGS topographic map showing the location of the proposed dam and reservoir, including a clearly marked access route.
3. MDEQ will determine the hazard classification for the dam.
4. Every permit contains General Conditions of Authorization as part of the permit. It is the responsibility of the applicant to ensure compliance with the General Conditions of Authorization.

NOTE: Any modification alteration, enlargement or major repair of an existing dam will be subject to the current design standards for the appropriate hazard classification as set forth in the regulations and may also require a permit.

Permit application, additional information and a copy of the regulations can be obtained here:

<https://www.mdeq.ms.gov/water/dam-safety/>

For additional information, please contact:
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(601) 961-5207
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Air Permitting

The Office of Pollution Control, Environmental Permits Division is responsible for permitting air emission units at stationary sources. The Mississippi Air Permitting Regulations (11 Miss. Admin. Code Pt. 2, Ch. 2.) require construction approval prior to beginning construction of an emission source or air pollution control equipment except when a source is eligible for an exclusion from a permit to construct.

Air Permitting Considerations:

1. Any new "Greenfield" stationary source must obtain an air permit to construct prior to beginning construction except as excluded in Title 11, Miss. Admin. Code Pt. 2, Ch. 2, Rule 2.13(D) and (E).
2. Pre-permit construction approval is available when all the requirements in Title 11, Miss. Admin. Code Pt. 2, Ch. 2, Rule 2.15 are met. Note the pre-permit construction approval only authorizes the construction, not the operation of air emission equipment. A construction and/or operating permit must be issued prior to operating the equipment.
3. Operating permits are required unless the facility is a true minor source. A true minor source is one which requires no federally enforceable restrictions to maintain a potential-to-emit (PTE) below the Title V thresholds.
4. A synthetic minor operating permit is required for sources which propose federally enforceable restrictions to limit the facility's PTE below Title V thresholds.
5. Title V Operating permits are required for Major Sources.

Note: A Certification of Construction form must be submitted prior to operating any air emission equipment. The applicant has 12 months from the date of Certification of Construction to submit an operating permit application.

Sources are encouraged to contact MDEQ to discuss air permitting options prior to filing an application. There is no application fee.

Permit applications can be obtained here:

<https://www.mdeq.ms.gov/permits/environmental-permits-division/applications-forms/>

A copy of the regulations can be found here:

<https://www.mdeq.ms.gov/about-mdeq/regulations/>

For additional information, please contact:
Jeffrey Bland, PE, Chief, Air 1 Branch,
Environmental Permits Division
(601) 961-5112
jbland@mdeq.ms.gov

Construction Activities

Construction activities are regulated under the Clean Water Act. Section 402(l)(2) exempts oil and gas exploration and production activities from the requirement to obtain coverage under a construction storm water NPDES General Permit. However, the rule does not exempt oil and gas sites from the requirements to protect waters of the state and strongly encourages the use of Best Management Practices (BMP's) to address sediment runoff from construction activities.

NOTE: MDEQ has determined construction activities occurring on an individual's property, such as modifying an existing farm pond, that will not be used for the sole purpose of oil and gas exploration and production do not qualify for this exemption. Therefore, construction projects equal to or greater than one acre are required to obtain coverage under the construction storm water NPDES General Permit.

For additional information, please contact:
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Environmental Compliance & Enforcement
Branch
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Spill Prevention, Control and Countermeasure Plans (SPCC)

The purpose of Spill Prevention, Control and Countermeasure Plans is to prevent oil discharges from reaching navigable waters of the U.S. and to ensure effective and proactive measures are used in response to an oil spill.

40 CFR Part 112 outlines the requirements for Spill Prevention, Control and Countermeasure (SPCC) Plans. SPCC Plans are required for a facility that meets three criteria: non-transportation related facility; have sufficient storage capacity; and could reasonably discharge to navigable waters or adjoining shorelines. The SPCC regulations require the facility owner/operator to prepare and implement a site specific SPCC plan for their facility. A facility may be required to submit a Facility Response Plan (FRP) to EPA, but FRP's only apply to a subset of SPCC regulated facilities. Additional information can be found on EPA's website:

<https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations>

Spill and Release Reporting

Any person or organization responsible for a release or spill is required to notify the federal government via the National Response Center when the amount reaches a federally-determined limit. Separate reporting requirements exist for oil spills and for hazardous substance releases.

EPA has determined that discharges of oil in quantities that may be harmful to public health or the environment include those that: violate applicable water quality standards; cause a film or sheen upon, or discoloration of the surface of the water; or cause a sludge or emulsion to be deposited beneath the surface of the water. EPA does provide several exemptions from the oil spill reporting requirements. Additional information can be found on EPA's website:

<https://www.epa.gov/emergency-response/oil-discharge-reporting-requirements>

For releases of hazardous substances, the federal government has established Superfund Reportable Quantities (RQ's). If a hazardous substance is released to the environment in an amount that equals or exceeds its RQ, the release must be reported to federal authorities, unless certain reporting exemptions for hazardous substances releases also apply. Additional information can be found on EPA's website:

<https://www.epa.gov/epcra/consolidated-list-lists>

To report oil and/or chemical spills call the National Response Center (NRC) 24 Hour National Spill Reporting Line at 1-800-424-8802.

