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## PROHIBIT SLANT DRILLING BENEATH GREAT LAKES

House Bill 5118 as introduced  
First Analysis (12-12-01)

Sponsor: Rep. Scott Shackleton  
Committee: Conservation and Outdoor  
Recreation

### ***THE APPARENT PROBLEM:***

Earlier this year, as President Bush called for an expansion of domestic oil and gas supplies, new discussions opened up in Michigan on allowing energy companies to drill beneath the Great Lakes. "Slant" drilling, or directional drilling, as it is called, is the drilling of a well at an angle to reach oil or gas deposits not directly below the wellhead. In Michigan, directional drilling is done primarily to avoid impacting areas that are susceptible to environmental degradation. The technology has been used to drill more than 2,000 directional wells on inland areas since the early 1970s. The technology has also been used to drill underneath the Great Lakes.

It is well established in Michigan that the state owns all of the bottomlands located within its jurisdictional boundaries. Therefore, the state has the right to lease the mineral rights of these bottomlands. The Department of Natural Resources (DNR) has issued 70 bottomlands leases since 1945, and of these leases approximately 30 to 45 permits are still active oil and gas leases. Moreover, between 1979 and 1997, the state issued thirteen well permits, ten for Lake Michigan, three for Lake Huron, which give permission for oil and gas exploration. Of these thirteen well permits six have resulted in natural gas production and two have resulted in oil production.

In 1997, the Michigan Environmental Science Board (MESB), which is composed mainly of environmental scientists appointed by the governor to do specialized research on public policy issues, was asked to evaluate the associated risks of directional drilling under the Great Lakes. The MESB concluded that directional drilling was a safe science when certain restrictions are enforced, the predominant restriction being that drilling should be prohibited within 1,500 feet of the shoreline, that new wells should be limited to those areas where oil and gas development infrastructure already exist, and also that drilling should be prohibited on any environmentally sensitive area. Now legislation has

been proposed that would generally ban drilling under the Great Lakes, except under certain conditions, and then only if drilling operations originated from locations above and inland of the ordinary high-water mark of the Great Lakes.

### ***THE CONTENT OF THE BILL:***

Generally, the Natural Resources and Environmental Protection Act (NREPA) prohibits oil and gas drilling beneath the Great Lakes unless the drilling originates from a location above and inland of the ordinary high-water mark of the Great Lakes. The bill would amend Part 5 of the act, which outlines the Department of Natural Resources' (DNR) powers and duties; Part 325, concerning Great Lakes Submerged Lands; and Part 339, concerning control of certain state lands, to prohibit slant drilling of oil and gas beneath the Great Lakes, except under certain limited circumstances. Beginning on the bill's effective date, and notwithstanding any other provision of Part 615 or rules promulgated under it, the supervisor of wells could not issue a drilling permit or authorize the drilling of an oil or gas well, including an exploratory well, that extended under the Great Lakes or the connecting or connected bays, harbors or waterways of the Great Lakes, except upon the adoption of a concurrent resolution by a majority of the members of the legislature declaring a state of energy emergency. However, if the supervisor issued a permit or authorized oil or gas well drilling under this provision, then he or she would have to require that all drilling operations originated from locations above and inland of the ordinary high-water mark of the Great Lakes. The bill would further specify that a person could not conduct drilling operations for the removal of oil or gas from under the Great Lakes or their connecting waterways unless the drilling operations began before the bill's effective date.

MCL 324.502 et al.

House Bill 5118 (12-12-01)

## ***BACKGROUND INFORMATION:***

### Directional Drilling in other Great Lakes States.

- Indiana: Limited exploratory drilling under Lakes Michigan has taken place, but no oil or gas has been produced.
- Illinois: Illinois has never issued an oil or gas mineral lease for Great Lakes bottomlands.
- New York: New York prohibits oil exploration, development, and production under the water of Lakes Erie and Ontario. Natural gas exploration, development, and production are not allowed under Lake Ontario, but gas exploration is not prohibited under Lake Erie.
- Ohio: Ohio does not allow directional drilling under Lake Erie.
- Pennsylvania: Pennsylvania does not prohibit drilling on Lake Erie bottomlands, but no leasing or drilling has taken place since the 1970s.
- Wisconsin: Wisconsin allows drilling for oil and gas under the Great Lakes in certain circumstances.
- Ontario, Canada: Ontario has approximately 700 offshore gas wells. Offshore drilling for oil is prohibited, but directional drilling for oil is permitted.

Recent History of Drilling under the Great Lakes. A March 20, 2001 Michigan Land Use Institute *Backgrounder* entitled “*Whoa! To New Great Lakes Drilling,*” notes that in 1997 the Department of Environmental Quality (DEQ) issued drilling permits to Newstar Resources (a Canadian company) to drill for oil and natural gas beneath Lake Michigan from wells on the Manistee County shoreline. (The company has also received leases from the Department of Natural Resources [DNR] in 1997 on the mineral rights on nearly 200 acres of state owned Lake Michigan bottomlands.) The institute, together with the Lake Michigan Federation, the West Michigan Environmental Action Council, and other environmental organizations, called for a moratorium on drilling to allow time for a study of the potential risks, and to establish more effective regulations. Subsequently, Governor John Engler requested the Michigan Environmental Science Board (MESB), which is composed of environmental scientists appointed by the governor to conduct research on public policy issues, to study the associated risks of directional drilling under the Great Lakes. The MESB concluded that directional drilling is a safe

science when certain restrictions are enforced, but that environmental conflicts could be more readily resolved and the aquatic and shoreline environment better protected if a lease agreement required an aggressive environmental impact assessment and stakeholder participation prior to the lease sale, and oil and gas development were limited to areas where existing infrastructures (pipelines, transmission lines and roads) were already available to minimize intrusions into virgin or undisturbed areas and to prevent further intrusions into minimally disturbed areas. Other MESB recommendations included: developing a comprehensive inventory of natural features along the coast, preparing energy development plans that include the input of local residents, elected officials, property owners, and conservation groups, strengthening regulations for waste disposal and geological evaluation during the permitting process; prohibiting the construction of new infrastructures; and establishing a drilling setback of at least 1,500 feet from the shoreline.

Both the DNR and the DEQ prepared to implement the science panel’s recommendations. Specifically, according to the *Backgrounder*, they committed to limiting new wells to those areas where oil and gas development infrastructure already existed. The DEQ issued a Supervisor of Wells Instruction that prohibited new oil and gas wells, or related industrial installations, unless the following conditions were met: new oil and gas wells would have to be located at least 1,500 feet from the shoreline; no new wells or related infrastructure would be allowed in areas zoned primarily for residential or recreational purposes; no new wells or infrastructure could be allowed on public land along the shoreline that was used primarily for recreation; new wells and equipment could not be visible from the shoreline or public recreation areas; new wells and related equipment would be barred from environmentally sensitive areas and from designated “critical dunes;” and “mud pits,” which are used to dispose of oil and gas wastes, would be barred along the shoreline.

In addition, the DNR enacted a temporary administrative prohibition against leasing Great Lakes bottomlands for oil and gas exploration until the MESB’s finding were implemented. However, according to the *Backgrounder*, neither the DEQ nor the DNR has acted on the MESB’s recommendation to establish a process to conduct comprehensive inventories of environmental features and existing uses of land in areas where drilling is proposed; prepare a careful energy development plan to avoid

land use conflicts in areas used for recreation and tourism, and where industrial development could harm environmentally sensitive areas; or to invite citizens, property owners, elected leaders, and environmental groups to participate in the planning and oversight of oil and gas development.

Congressional Action. An amendment to an energy appropriations bill, which was signed into law on November 12, 2001, prohibits the federal government and any state government from issuing leases for new oil and gas directional or offshore drilling in, or under, the Great Lakes. The amendment also directs the Army Corps of Engineers to conduct a complete study of the environmental effects of drilling in the Great Lakes. The federal legislation reads as follows:

“The Secretary of the Army shall conduct and submit to Congress a study that examines the known and potential environmental effects of oil and gas drilling activity in the Great Lakes (including effects on the shorelines and water of the Great Lakes): Provided, That during the fiscal years 2002 and 2003, no Federal or State permit or lease shall be issued for new oil and gas slant, directional, or offshore drilling in or under one or more of the Great Lakes.”

### ***FISCAL IMPLICATIONS:***

The House Fiscal Agency (HFA) estimates that the bill could reduce future revenue to the Michigan Natural Resources Trust Fund. Under the bill, it would be difficult to determine what these future revenues might be: royalty revenue is dependent on the productive life of developed wells, and on the amount and value of oil or gas produced. (10-16-01)

### ***ARGUMENTS:***

#### ***For:***

Currently, Michigan is the only Great Lake state to allow directional drilling. Other states surrounding the lakes recognize the risks to the environment inherent in such an activity. Questions about possible environmental damage led to a suspension of leases for new wells four years ago, while the Michigan Environmental Science Boards (MESB) studied the possibility of such risks. The board's conclusions were, among other things, that any drilling should be limited to areas where existing infrastructures (roads, pipe lines, etc.) were already available to minimize intrusions into areas that were environmentally sensitive. Specifically, the board said that, based on a review of the available data, the board found that there was little to no risk of contamination of the

Great Lakes bottom or waters, but there did exist a greater risk for potential impact to shoreline environments where the well head and its associated infrastructure are located.

#### ***For:***

In written testimony presented to the House committee, a representative of the environmental community points out several other problems related to drilling which, combined, lead to the conclusion that any benefits associated with drilling do not justify placing the Great Lakes and the fragile shoreline areas at risk:

- Oil and gas extraction on coastal areas has a negative impact on other business, especially tourism and recreational businesses. These businesses form the backbone of Michigan's economy.
- There isn't enough oil and gas below the lakes to justify the risks involved. Since 1979, existing wells have only produced 438,000 barrels of oil and 17.7 billion cubic feet of natural gas.
- There have been reports of incidents involving the release of hydrogen sulfide gas associated with current oil and gas wells along the coast. These incidents affected the health of the local population, resulting in emergency hospital treatment and numerous evacuations.
- More could be achieved by reducing U.S. energy use through energy conservation and efficiency and moving toward alternative fuels. Moreover, alternative energy experts predict that alternatives to the internal combustion engine are likely to be in common use in five to ten years.
- Pollution cleanup from existing oil and gas wells is a serious environmental problem that has not been addressed satisfactorily in Michigan. Pollution from these sites threatens public health, and fish and wildlife habitat.
- Although Congress recently adopted a measure to suspend drilling for two years, state leaders dispute the authority of Congress to ban states from granting leases. Consequently, if a state ban isn't enacted, the state and federal governments might litigate the issue, wasting taxpayers' money.

#### ***Against:***

If Michigan gives the federal government the authority to ban drilling in the Great Lakes, it may decide, at some time in the future, to allow diversion of Great Lakes' water.

**Response:**

In a letter to a local newspaper (*Lansing State Journal*, November 8, 2001), the Senate sponsor of the ban on Great Lakes drilling argued against this assertion as follows:

- Congress has always had the power to regulate commerce among the states. This is why there aren't 50 separate clean air acts, clean water acts, and safe drinking water acts. Moreover, the courts have upheld the right of the federal government to set national standards to protect the public health and the environment.
- The federal legislation does not say that Michigan can't drill in the Great Lakes. It says that no Great Lakes state may drill.
- The federal government has responsibilities to the citizens of all Great Lakes states. After all, a Great Lakes governor would not be allowed to permit wastewater treatment plants to dump raw sewage into the Great Lakes. Similarly, an oil or gas drilling accident that began in Michigan could quickly spread to other Great Lakes states and states downstream.
- It was the federal government which gave the Great Lakes states the authority to create the Great Lakes Compact, under which water may only be diverted if every Great Lakes state and their counterparts in Canada agreed.

**Against:**

In written testimony presented to the House committee, an opponent of the legislation, who also identified herself as a biologist, geologist, and an environmentalist, complained that misconceptions abound regarding drilling under the Great Lakes, because the press has chosen to "spread the news of fear." Instead, the testimony asks that the legislature rely upon DEQ, DNR, and MESB experts who have researched the subject. The testimony offered the following as a rebuttal to objections voiced in opposition to drilling, especially with regard to the Manistee County area:

- Other Great Lakes states don't drill under the lakes because they don't have oil and gas-producing formations under their shoreline areas.
- In Manistee Township, along the Lake Michigan shoreline, homes were built adjacent to oil and gas facilities. Moreover, state equalized values (SEV) for the area have increased, so oil and gas development there has not harmed property values in the area.

- While it is true that gas and oil extracted from under the Great Lakes won't solve the country's energy needs; one well can produce enough gas to supply the energy needs for 4,000 Michigan households.

- Oil and gas production needn't have a negative impact on other businesses. In Manistee County, not only did the City of Manistee collect more than \$6 million in royalty payments from oil and gas production, other businesses have built there in an industrial park, and large homes have been built nearby.

- Science, history, and technology indicate that oil and gas can be safely extracted from the ground and below the Great Lakes from an onshore position. Directional drilling isn't new, and the existing 45 wells drilled under or along the shoreline in Manistee County have not harmed the lake.

- The real environmental hazards in the Great Lakes come from other sources: wastewater sewage overflows, sedimentation and erosion problems, toxic chemical spills, sand mining, dredging, and attacks on fish from imported exotic species and ecosystem imbalances, to name a few. Moreover, if oil drilling is not permitted on the lakes, they will be crowded with oil tankers.

**POSITIONS:**

Representatives of the following organizations either testified or submitted a card during House committee hearings in support of the bill:

- The Michigan Environmental Council (MEC)

Representatives of the following organizations either testified or submitted a card during House committee hearings in opposition to the bill:

- The Department of Environmental Quality (DEQ)
- The Department of Natural Resources (DNR)
- The Michigan Chamber of Commerce
- The Michigan Oil and Gas Association (MOGA)
- Associated Petroleum Industries of Michigan

Analyst: R. Young

■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.