An Informational Brochure on Proposed Lease Sale 181 in the Eastern Gulf of Mexico

OCS Report MMS 2000-088

- Informational Background
- Summary of the Draft Environmental Impact Statement



What Is the Sale About?

As part of the Outer Continental Shelf (OCS) Oil and Gas Leasing Program for 1997-2002, the Minerals Management Service (MMS) proposes to hold a lease sale in the Eastern Gulf of Mexico in 2001. This sale is the only one in the Eastern Gulf during the current 5-Year Program, and would be the first since 1988. It is scheduled for December 2001. Oil and gas companies will submit bids for the oil and gas lease rights on OCS blocks, which are about 3 by 3 miles square. The proposed Lease Sale 181 area includes 120 blocks on a narrow strip offshore Alabama, and another 913 blocks in deeper water nearer to Louisiana than Florida. The deeper water area is immediately adjacent to the prolific energy-producing area in the Central Gulf of Mexico called Mississippi Canyon.

The proposed lease sale area encompasses about 5.9 million acres or 8 percent of the total area in the Eastern Planning Area (EPA). Only a portion of the area is expected to be leased.

This proposed lease sale has been carefully designed to take into account concerns expressed by the Governors of Alabama and Florida. It omits nearshore areas off Alabama out to 15 miles, as that State's Governor asked, and does not include any area within 100 miles offshore Florida, as that State's Governor asked. Notice of the proposed lease sale was published and a series of public meetings were held to gather information from agencies and communities on potential issues and concerns.



Eastern Gulf of Mexico Proposed Sale 181



What Steps Have Already Occurred?

The MMS started the public process when it published the Call for Information and Nominations (Call) and the Notice of Intent (NOI) to Prepare an Environmental Impact Statement (EIS) on January 25, 1999. The required 45-day comment period closed on March 26, 1999. Additional public notices were distributed. The MMS conducted scoping meetings in several cities to update the Gulf of Mexico's environmental information base and to give those citizens with an interest in the OCS Program an early chance to participate in identifying the issues, alternatives, and mitigation measures to be addressed in the Draft Environmental Impact Statement (EIS).

What Supplies of Energy May Be There?

The proposed Lease Sale 181 area contains largely unexplored but possibly significant oil and gas resources. The MMS estimates that as much as 240 million barrels of oil and 1.8 trillion cubic feet of gas could be developed as a result of this lease sale. The entire area could contain 370 million barrels of oil and 3.2 trillion cubic feet of gas. Few wells have been drilled in the Sale 181 area. As more wells are drilled, and more and better information is obtained about the hydrocarbon potential, these estimates could ultimately rise or fall. They are the best estimates available now.

At present, there are two gas development projects proposed on existing leases in the sale area. One project is near Alabama and involves a Chevron proposal to develop a natural gas field; another is about 100 miles offshore Alabama and involves Amoco's (now BP) proposal for gas production from their King's Peak project.

What Is in an EIS?

The MMS has a policy to prepare an EIS on proposed OCS oil and gas lease sales. In an EIS, the MMS looks at many factors and what the potential environmental effects might be. These factors included coastal areas, pipelines, air and water quality, jobs, sea-bottom habitats for marine life, oil spill risk, the necessity for quick and effective response to oil spills, and military operations in this area of the Gulf.

In preparing the EIS for Lease Sale 181, the MMS analyzed **three** alternatives.

Alternative A, which is the action proposed in the current 5-Year Leasing Program, would offer for lease all unleased blocks within the proposed Lease Sale 181 area: 1,033 blocks covering 5.9 million acres located 15-200 miles offshore in water depths ranging from 13 to 11,237 feet. At present, 39 blocks in this area are under lease.

Alternative **B**, if adopted, would defer 126 blocks east of the $86^{\circ}41$ ' W. longitude. These would be removed from the proposed lease sale because of possible conflicts between oil and gas operations and military operations. The MMS and the Air Force (Department of Defense) collaborated on this alternative.

Alternative C is the "No Action" alternative, which is equivalent to canceling the lease sale. The estimated 30-240 million barrels of oil and 0.53-1.80 trillion cubic feet of gas would not be developed, at least for the near future. There

would be no environmental impacts from lease sale activities in this case.

After a Final EIS is prepared MMS will select one of these alternatives.

What Might Happen as a Result of this Lease Sale?

To provide a framework for detailed analysis of the possible impacts from the proposed lease sale in the Draft EIS, activities that are expected to result from the sale are estimated. Exploring for oil and gas would take from 5 to 10 years. If commercial-size discoveries are made, then development of the field begins. Production from an offshore platform could continue 20 to 30 years. For the proposed sale, 30-185 exploration wells are estimated, with 6-33 of these in water depths of less than 60 meters (197 feet). It is estimated that 55 to 305 development wells will be drilled from 6 to 21 production platforms; 2-6 of these platforms would be in the gas-prone areas with water depths of less than 60 meters. As much as 1,500 miles of pipelines may be installed offshore.

The MMS projects that one to seven pipelines will be built to shore and 10-68 miles of inland pipeline will be laid as a result of this proposed lease sale. The landfalls will most likely occur in Plaquemines Parish, Louisiana, and Mobile County, Alabama, because the infrastructure handle the new to production exists there. Of the 25 existing pipe yards that service OCS activities, most are in south-central Louisiana and southeastern Texas. The Mississippi-Alabama and Florida Panhandle areas each have only one pipe yard.



In support of activities resulting from the sale, up to 1,275 service-vessel trips and 17,750 helicopter trips might occur annually. Nine ports will likely serve as support bases -Dauphin Island, Mobile, and Theodore, Alabama; Grand Isle, Leeville, Morgan City, Port Fourchon, and Venice, Louisiana; and Pascagoula, Mississippi. While unlikely, Panama City and Pensacola, Florida, may develop additional services to support OCS activities.

The Risk of Oil Spills: Several aspects of potential oil spills must be considered when oil spill risk is discussed. First, what is the likelihood that a spill could actually occur? In the event that a spill does occur, how big is the spill, how long will the slick last, and which way will it go? Finally, how do we clean it up and keep the slick from reaching sensitive coastal areas? The MMS imposes on the companies many equipment and safety requirements that greatly reduce the chance of an oil spill occurring, as well as having regular training and drills to ensure quick response. As one example, MMS requires the use of "downhole" safety values that ensure that even if the platform is destroyed the flow of oil is shut off. Despite more than 3,900 production facilities in operation in the Gulf of Mexico, there has been no spill greater than 1,000 bbl from a production platform for more than a decade.

The MMS modeled the likely paths of potential oil spills originating anywhere in the Sale 181 area. The spill model assumes that a spill has occurred and that there is no cleanup or weathering of the spill. Given those conditions, the area with the highest probability of contact from oil spilled within the proposed sale area would be the Alabama shore. The Draft EIS predicts that there will be small pollution events that could temporarily affect the enjoyment or use of some beach segments in Alabama or Florida, but have little effect on the number of beach users or tourism. Working with the State of Florida, the MMS developed a proposed Oil Spill Response Stipulation to further minimize the risk of oil spills reaching Florida State coastal waters or the coastline. Among other things, this requires that the operators and lessees must stage state-of-the-art, oil-spill response equipment to deploy and operate at the spill site within 8 hours of a spill event.

Responding to Oil Spills: Every operator and every operation is required to have a spill response plan. Equipment used to respond to spills is pre-positioned all along the Gulf Coast, including several locations in Alabama and the Panhandle of Florida. The Coast Guard's National Strike Team is also located in Mobile, Alabama. Once an oil spill occurs there are natural factors that help. Some of the oil will evaporate typically 20 percent in less than one day. Prevailing currents or winds can take a spill out to sea. Dispersants can also be applied to a spill to break up the slick and reduce the potential impacts. Oil spill booming equipment to protect shorelines is stored at Mobile, Panama City, and Pensacola.

What About Tar Balls?

Tar balls have always been found along Gulf beaches for centuries. Indians used them in tool building. These tar balls were from natural seepage. Recently, researchers have estimated a natural seepage rate of about 120,000 barrels per year - from just one area in deepwater. Because oil may be seeping from the same reservoirs from which oil is being produced, it is difficult to determine the exact source of a given tarball. We do know that many of the oils being produced in the Gulf do not have the components that form tar balls. The MMS has conducted a number of studies to determine the source of tarballs found on Gulf coastal beaches. The studies show that as much as half of the tar on Louisiana and Florida beaches comes from vessel transportation — the culprit being tank cleaning.

Areas of Seafloor Life: Certain areas of the seafloor of the Eastern Gulf have hard-bottom features that provide habitat for marine life. These are called "live-bottom" areas and are the home of seagrasses, corals, and the many forms of life associated with them. These areas are widely distributed, so one of the conditions for certain blocks in the proposed Sale area is that the lessee and operator will do surveys to identify such areas in water 328 feet deep or less. Where live-bottom areas are found, the operators are required to do or not do certain things to protect the sea life, such as relocate their operations.

Air Quality: The Draft EIS analysis indicates that emissions related to Sale 181 oil and gas activities will not have significant impacts on onshore air quality, for several reasons. Prevailing winds, the heights and rates of the emissions release, and the distance of the activities from shore work against significant pollution effects. Onshore air quality classifications would not change and concentrations of pollutants will be less than that allowed by regulations.

Water Quality: The Draft EIS analysis indicates that discharges related to Sale 181 oil and gas will not cause significant degradation of either coastal or marine water quality. Impacts to coastal water quality are not expected to disrupt current uses designated for these waters. Routine discharges would contribute less than 1 percent to long-term, regional, offshore water-quality degradation.

Military Operations: In the blocks in the easternmost part of the proposed Lease Sale 181 area, oil and gas activities are proposed to be restricted during certain periods of time to avoid space-use conflicts with military operations. Exploratory operations can be conducted for 6-month periods only to accommodate testing and training of weapon systems and personnel from Eglin Air Force Base and other military installations.

Economic Effects: In analyzing economic effects of proposed Lease Sale 181, the MMS sees the central region of the Gulf Coast benefitting from as many as 5,534 jobs during peak activity, probably in the year 2019. Jobs created indirectly

would total 1,691, with an additional 2,202 more jobs in the private sector. If only the lowest estimated resources are found, 2,408 direct jobs, 619 indirect jobs, and 919 "induced" jobs would be created. Most of the jobs are expected in Jefferson, Orleans, Plaquemines, St Bernard. and St. Tammany Parishes in Louisiana; few jobs, if any, would be created in the Florida Panhandle.



Jack-Up Rig

What Happens After the Sale Is Held?

After a company acquires a lease, they could submit an exploration plan (EP) to MMS proposing to drill wells on specific sites. The MMS would review the EP to determine potential impacts on the environment and ensure engineering safety. Affected States would also review the EP and determine its consistency with the State's coastal zone program. After all reviews, MMS would approve the EP, if acceptable. Other Federal agencies also review and issue permits for aspects of the activities. For example the Environmental Protection Agency issues the water discharge permits. The company that is the operator of the lease would drill an exploratory well that could take 30-90 days using either a jack-up rig (see photo) in shallow water or a semi-submersible rig or a drillship (see photo) in deepwater.

Before any development or production activities can begin, a development plan must be submitted to MMS for review and approval. Specific environmental, archaeological, and biological information must be submitted in support of the plans. The plans and supporting information are evaluated for seafloor or drilling hazards; air and water quality impacts; hydrocarbon resource conservation; appropriate mitigation of potential impacts; and compliance with NEPA, MMS operating regulations, and other requirements. Other Federal agencies and the designated coastal zone management agencies in the Gulf Coast States may take part in the review process. During the production phase, companies pay a royalty to the U.S. Government. Where Can I Obtain a Copy of the Draft EIS?

The MMS has released the Draft EIS for public review and comment on December 1, 2000. You can obtain single copies free of charge from:

> Minerals Management Service Gulf of Mexico OCS Region Public Information Office 1201 Elmwood Park Blvd. New Orleans, LA 70123-2394 or by calling 1-800-200-GULF (toll free).



Drillship



What Are the Next Steps?

MMS will hold public hearings to receive comments on the Draft EIS. These hearings will provide the Secretary of the Interior with information from interested parties; he will use this information to evaluate the potential effects of the proposed lease sale and revise the Draft EIS as necessary. Responses to comments received at the public hearings and in writing will be incorporated into the Final EIS. The Final EIS will be published in July 2001. On the basis of the final EIS, MMS will make a decision on whether or not to actually hold the lease sale. The hearings will be held at these times and places:



You may send written comments on the Draft EIS to the Regional Supervisor, LE (MS 5410), Minerals Management Service, Gulf of Mexico OCS Region, 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123-2394. The comment period on the Draft EIS will close on January 23, 2001. Visit the MMS website at www.mms.gov.

What if I Want More Lease 181 Sale Information?

Contact the MMS Public Affairs office in the Gulf of Mexico Region at (504) 736-2595; the MMS Eastern Gulf Information Office at (850) 433-2279, or visit www.gomr.mms.gov/homepg/offshore/egom/sale181.html. The Eastern Gulf Office is located at 41 North Jefferson St., Pensacola, FL 32501