CHAPTER 5 CONSULTATION AND COORDINATION

5. CONSULTATION AND COORDINATION

5.1. DEVELOPMENT OF THE PROPOSED ACTIONS

This EIS addresses two proposed Federal actions. The proposed actions are two oil and gas lease sales (Lease Sales 189 and 197) in the proposed lease sale area of the EPA of the GOM OCS (**Figure 1-1**), as scheduled in the 5-Year Program. The purpose of the proposed actions is to offer for lease all unleased blocks in the proposed lease sale area that may contain economically recoverable oil and natural gas resources, thereby reducing the Nation's need for imported oil and natural gas. The proposed lease sale area is the same area offered under Lease Sale 181 in 2001. Each proposed action includes existing regulations and lease stipulations designed to reduce environmental risks. A proposed action is presented as a set of ranges for resource estimates, projected exploration and development activities, and impact-producing factors.

5.2. CALL FOR INFORMATION AND NOTICE OF INTENT TO PREPARE AN EIS

On February 7, 2002, the Call and the NOI (to prepare an EIS) on the proposed actions, Lease Sales 189 and 197, were published in the *Federal Register*. Additional public notices were distributed via local newspapers, the U.S. Postal Service, and the Internet. A 45-day comment period was provided; it closed on March 25, 2002. Federal, State, and local governments, along with other interested parties, were invited to send written comments to the GOM Region on the scope of the EIS. The MMS received six comment letters in response to the Call/NOI. These comments are summarized below.

5.3. DEVELOPMENT OF THE DRAFT EIS

Scoping for the Draft EIS was conducted in accordance with CEQ regulations implementing NEPA. Scoping provides those with an interest in the OCS Program an opportunity to provide comments on the proposed actions. In addition, scoping provides MMS an opportunity to update the GOM Region's environmental and socioeconomic information base. The scoping process officially commenced on February 7, 2002, with the publication of the Call/NOI in the *Federal Register*. Formal scoping meetings were held in Louisiana and Alabama. The dates, times, locations, and public attendance of the scoping meetings for the proposed Eastern GOM lease sales were as follows:

March 12, 2002	March 12, 2002	March 14, 2002
2:00 p.m. Adams Mark Hotel 64 South Water Street Mobile, Alabama	6:30 p.m. Adams Mark Hotel 64 South Water Street Mobile, Alabama	1:00 p.m. Minerals Management Service 1201 Elmwood Park Blvd. New Orleans, Louisiana
9 registered attendees	3 registered attendees	13 registered attendees

Attendees at the meetings included representatives from local governments, interest groups, industry, businesses, and the general public. Scoping topics included the following: air quality; alternative fuels and conservation; biological resources; navigation; oil spills; other issues; lease sale area; socioeconomic; State issues; terrorism; waste; and water quality. All scoping comments received were considered in the preparation of the Draft EIS. The comments (both verbal and written) from the Call/NOI and the three scoping meetings have been collated as follows:

Air Quality

- Consider the ability of onshore urban areas to meet the new USEPA 8-hour ozone standard and more stringent standards for PM₁₀.
- Evaluate and address impacts to air quality from offshore development air emissions.
- Address H₂S impacts.

- Determine the contribution of OCS activities to global warming.
- Analyze OCS emissions on noncompliance coastal areas.
- Identify airsheds where there will be projected increases of emissions from onshore processing facilities.
- Calculate OCS-related emissions from onshore service and processing facilities.
- Improve air quality standards.
- Model projected emissions from new onshore OCS-related facilities to insure that these facilities do not contribute to onshore nonattainment.

Alternative Fuels and Conservation

- Evaluate alternative fuels and technologies, and fuel efficiency.
- Consider increased fuel efficiency under the no action alternative.

Biological Resources

- Address impacts of noise from vessels, seismic surveys, and side-scan sonar surveys on whales, turtles, and fish. Quantify the impacts.
- Discuss foreign species brought in from drilling rigs from other areas.
- Consider the effects of oil and gas platforms on total fish populations.
- Investigate abundance of jellyfish in relation to offshore structures.
- Address impacts of mercury contamination in fish on public health.
- Determine guidelines for explosive removals of rigs to protect sea turtles.
- Address the impacts of structures on the migration of sperm whales, marine and coastal birds, and the spawning of fish species such as blue fin tuna and swordfish.
- Determine and address the relationship of hydrocarbon discharges to fibropapilloma tumors.
- Assess impacts to EFH.
- Consider the impacts of OCS activities on sea turtles. Migratory routes and coastal nesting areas should be examined in relation to a proposed action. Also, consider avoidance behavior due to OCS activities.
- Address the effects of oil and gas activities on marine and coastal environments and the sensitive biological resources and critical habitats associated with them.
- Complete detailed benthic studies to broaden the current understanding of the presence and function of deepwater benthic resources in the EPA.

Navigation

- Include OCS structures as hazards to navigation.
- Address the impacts of unmarked OCS pipelines as they cross the coastal zone.
- Address the impacts of OCS coastal pipelines that are exposed due to erosion.

Oil Spills

• Honestly assess oil-spill impacts, concentrations of PAH as low as 1 part per billion are toxic to juvenile pink salmon.

- Analyze impacts of oil spills.
- Address cumulative long-term impacts from not only large spills, but also from small spills.
- Assessment of the short and long-term environmental impacts of response capabilities and worst-case accidental discharges from both deepwater blowouts and pipeline ruptures from representative locations including spill trajectory models. Analyze the fates and effects of discharges and the potential for bioaccumulation.

Other Issues

- The EIS process does not function properly. The scientific conclusions from the EIS appear to be overlooked when final decisions on lease sales are made.
- Create a realistic development scenario consistent with the deepwater nature of the lease sale area.
- Consider the advanced technology used to drill wells resulting in less impact to the environment.
- Descriptions of the affected environment and environmental and technological analyses must be accurate, comprehensive, and thorough.
- Address the impacts of the oil and gas transportation process from offshore to the consumer.
- Cumulative analysis should consider that activities in the CPA can impact resources in the EPA.
- Calculate the amount of trash and debris generated from OCS activities.
- Address the following: natural resources including air quality, water quality and quantity, marine and coastal habitat, flora and fauna (including threatened and endangered species), coastal littoral processes, any publicly owned and managed lands, cultural or historic resources, new or unusual technologies, threatened and endangered species, fisheries, benthic habitat, socioeconomic and tourism issues, recreational activities, marine protected areas, commercial and recreational fishing, methane hydrates, cruise ships and other vessel traffic, and aquaculture.
- Address the cumulative impacts from the discharge of drilling muds and cuttings, debris, pipeline placement, and rig construction, which have the potential to degrade water quality and result in deleterious effects to marine and coastal habitats. There is the potential for persistence.
- Develop rigorous environmental and technological information for accurately assessing the environmental impacts of all OCS activities, especially in the EPA's deepwater environment.
- Operational discharges resulting from using synthetic drilling muds and large volumes of industrial chemicals necessary for deepwater drilling operation should be analyzed to better understand their potential impacts on marine and coastal resources.
- Address how deep circulation dynamics affect operational activities and impact the
 environment.

Proposed Lease Sale Area

- Address the concern over the reduction of lease sale area.
- Expand the lease sale area in the future.

• MMS should evaluate drilling activities arising from Lease Sale 181 before authorizing any further lease sales in this area.

Socioeconomic

- Address impacts to local roads, schools, and government services from OCS-related activities.
- Discuss both the positive as well as the negative socioeconomic impacts form OCS-related activities.
- Address OCS-related homicide and suicide rates.
- Include results from MMS's study on OCS impacts on family life in south Louisiana.
- Continue the documentation of onshore infrastructure impacts. Follow these impacts beyond the EIS phase.
- Discuss that the industrial character of offshore hydrocarbon development is often inconsistent with the existing economic base in many coastal communities of tourism, coastal recreation, and fishing.

State Issues

- Identify impact of air emissions to the Mobile Bay Area using accepted USEPA models.
- Provide adequate protection for the live-bottom areas, pinnacle reefs, and chemosynthetic communities offshore Alabama.
- OCS activities should be carried out in full compliance with relevant Alabama laws, rules and regulations, and should be consistent with Alabama's CZMP.
- Accurately and thoroughly assess the potential impacts to Florida's social and economic structure.
- Florida does not support activities that could interfere with military defense activities. Evaluate the potential for OCS activities to conflict with military use in the area of the proposed lease sales.
- Evaluate the State's enforceable policies and how proposed activities affect those policies.
- Discuss whether currents may move discharged materials (permitted and accidental) out of the immediate area and onto the Florida shelf.
- Include complete descriptions of these potentially impacted areas: live-bottom habitat, seagrass beds, mangroves, coastal marshes, specially designated lands and waters, and other critical habitat for Florida species, including threatened and endangered species.
- Address hydrocarbon releases. Hydrocarbon releases can range from single or
 episodic spill events to prolonged seepage. Understanding how far and where
 hydrocarbons and other pollutants may migrate beyond the immediate site is critical
 to assessing potential impacts. They could be carried to the west coast of Florida by
 the Loop Current.
- Louisiana is a host State for OCS operations. It plays a significant part in OCS development; therefore, Louisiana should receive a larger portion (at least 50%) of the revenues.
- Continue to document onshore infrastructure. There are concerns, though, over how these issues are addressed beyond the EIS stage.

- Identify pipelines coming from the OCS and where they come ashore.
- Be consistent with Louisiana's 2050 plan.
- Analyze coastal erosion in Louisiana, including cumulative impacts. Coordinate with State and Federal agencies on this issue.

Terrorism

- Address impacts of terrorism for both offshore and onshore infrastructure (including processing facilities).
- Assess the ability to protect offshore and onshore infrastructure from terrorist attacks.
- Analyze terrorist threats.

Waste

- Discuss regulations and enforcement efficiency with respect to waste.
- Address that the need for a place to safely dispose of vessel wastes (bilge water, sewer, and garbage discharges).
- Discuss that tighter regulations could cause more drilling muds to come to Louisiana, resulting in mercury contamination in fish.

Water Quality

- Address produced waters.
- Consider vessel-associated contamination and detail enforcement efficiency.
- Address volumes of drilling muds and calculate this quantity.
- Discuss the effects of drilling muds discharges on water quality.
- Analyze the cumulative impacts of produced-water discharge.

The MMS also conducted early coordination with appropriate Federal and State agencies and other concerned parties to discuss and coordinate the prelease process for the proposed lease sales and this EIS. Key agencies and organizations included NOAA Fisheries, FWS, DOD, USCG, USEPA, State Governors' offices, and industry groups. On February 27, 2002, representatives of MMS's GOM Region met with representatives of the Florida Governor's office, via telephone, to discuss any concerns the State may have regarding the proposed actions. The MMS staff presented a plan of action for this Eastern GOM EIS (Chapter 2.1., Multisale NEPA Analysis), as well as facts on the proposed lease sale area (Chapter 1.1., Description of the Proposed Actions). The State of Florida's major concerns were that the EA for proposed Lease Sale 197 would not include all new issues or information that are revealed from the time the Final EIS is published nor would the State be given the opportunity to address them until after the EA is published.

Although the scoping process was formally initiated on February 7, 2002, with the publication of the Call/NOI in the *Federal Register*, scoping efforts and other coordination meetings have proceeded and will continue to proceed throughout this NEPA process. The GOM Region's ITM's provide an opportunity for MMS analysts to attend technical presentations related to OCS Program activities and to meet with representatives from Federal, State, and local agencies; industry; MMS contractors; and academia. Scoping and coordination opportunities are also available during MMS's requests for information, comments, input, and review on other MMS NEPA documents including:

- Public hearing comments on the Draft EIS on the 5-Year Program:
- Scoping and comments on the 5-Year Program;
- Requests for comments on the EA's for CPA Lease Sales 172, 175, 178, and 182;

- Requests for comments on the EA's for WPA Lease Sales 174, 177, 180, and 184;
- NOI, scoping meetings, public hearings, and comments on the EIS for the Proposed Use of Floating Production, Storage, and Offloading Systems on the GOM Outer Continental Shelf, WPA and CPA; and
- NOI, scoping meetings, public hearings, and comments on the EIS for CPA Lease Sales 185, 190, 194, 198, and 201 and WPA Lease Sales 187, 192, 196, and 200.

5.4. DISTRIBUTION OF THE DRAFT EIS FOR REVIEW AND COMMENT

The MMS sent copies of the Draft EIS for review and comment to the following public and private agencies and groups. Local libraries along the Gulf Coast were also provided copies of this document. The list of libraries and their locations is available on the MMS Internet website at http://www.gomr.mms.gov. To initiate the public review and comment period on the Draft EIS, MMS published a NOA in the *Federal Register*. Additionally, public notices were mailed with the Draft EIS and placed on the MMS Internet website. The comment period on the Draft EIS closed on January 24, 2003. All comments received on the Draft EIS were considered in the preparation of this Final EIS.

Federal Agencies

Congress

Congressional Budget Office

House Resources Subcommittee on Energy

and Mineral Resources

Senate Committee on Energy and Natural

Resources

Department of Commerce

National Marine Fisheries Service

National Oceanic and Atmospheric

Administration

Department of Defense

Department of the Air Force

Department of the Army

Corps of Engineers

Department of the Navy

Department of Energy

Strategic Petroleum Reserve PMD

Department of the Interior

Fish and Wildlife Service

Geological Survey

Minerals Management Service

National Park Service

Office of Environmental Policy and

Compliance

Office of the Solicitor

Department of State

Office of Environmental Protection

Department of Transportation

Coast Guard

Office of Pipeline Safety

Environmental Protection Agency

Region 4

Region 6

Marine Mammal Commission

State and Local Agencies

Alabama

Governor's Office

Alabama Highway Department

Alabama Historical Commission and State

Historic Preservation Officer

Alabama Public Service Commission

Department of Environmental Management

Department of Conservation and Natural

Resources

South Alabama Regional Planning

Commission

State Docks Department

State Legislature Natural Resources

Committee

State Legislature Oil and Gas Committee

Florida

Governor's Office

Department of Community Affairs

Department of Environmental Protection

Department of State Archives, History and

Records Management

Bureau of Archaeological Research

Florida Coastal Zone Management Office

State Legislature Natural Resources and

Conservation Committee

State Legislature Natural Resources

Committee

West Florida Regional Planning Council

Louisiana

Governor's Office

Calcasieu Regulatory Planning Commission

Department of Culture, Recreation, and

Tourism

Department of Environmental Quality Department of Natural Resources Department of Transportation and Development

Department of Wildlife and Fisheries Louisiana Geological Survey

State Legislature Natural Resources Committee

State House of Representatives Natural Resources Committee

Mississippi

Governor's Office
Department of Archives and History
Department of Natural Resources
Department of Wildlife Conservation
State Legislature Oil, Gas, and Other Minerals
Committee

Texas

Governor's Office
Attorney General of Texas
Department of Water Resources
General Land Office
Southeast Texas Regional Planning
Commission
State Legislature Natural Resources
Committee
State Senate Natural Resources Committee
Texas Historical Commission
Texas Legislation Council
Texas Parks and Wildlife Department

Texas Water Conservation Association Texas Water Development Board

Industry/Companies

Amoco Production Company Cartwright & Co., Inc. John E. Chance and Associates, Inc. Kerr-McGee Corp. Louisiana Land and Exploration Company Louisiana Offshore Oil Port, Inc. Groups American Littoral Society, Project Reefkeeper Audubon Society, Austin, Texas Clean Gulf Associates Coastal Conservation Association Gulf of Mexico Fishery Management Council Gulf States Marine Fisheries Council Louisiana Gulf Coast Conservation Association Louisiana Wildlife Biologists Association Louisiana Wildlife Federation, Inc. Natural Resources Defense Council, Inc. New England Aquarium

Petroleum Information Corporation Save Our Coast Sierra Club, Lone Star Chapter Sierra Club, New Orleans Chapter Sierra Club, Southern Plains Representatives Texas Conservation Foundation Texas Nature Conservancy Texas Shrimp Association

5.5. Public Hearings

In accordance with 30 CFR 256.26, MMS held public hearings to solicit comments on the Draft EIS. The hearings provide the Secretary with information from interested parties to help in the evaluation of potential effects of the proposed lease sales. Announcement of the dates, times, and locations of the public hearings were included in the NOA for the Draft EIS. Notices of the public hearings were also included with copies of the Draft EIS mailed to the parties indicated above, posted on the MMS Internet website (www.gomr.mms.gov), and published in the *Federal Register* and local newspapers (*The Times-Picayune*, *The Mobile Press Register*, *The Sun Herald*, and *The Pensacola News Journal*).

The hearings were held on the following dates and at the times and locations indicated below:

January 8, 2003

1:00 p.m. Hampton Inn and Suites 5150 Mounes Street Harahan, Louisiana

9 registered attendees 3 speakers

January 9, 2003

2:00 p.m. Adams Mark Hotel 64 South Water Street Mobile, Alabama

12 registered attendees 4 speakers

Attendees at the hearings included representatives from State and Federal government, interest groups, industry, businesses, and the general public. All hearing comments received on the Draft EIS were considered in the preparation of this Final EIS. The comments presented at each of the public hearings are summarized below.

Harahan, Louisiana, January 8, 2003

Michael Lyons, representing the Louisiana Mid-Continent Oil and Gas Association, stated his support for the Draft EIS and the proposed lease sales (Alternative A). He is concerned about the stipulations in the Draft EIS that he feels may hinder the E&P process with respect to length of time. He discussed how the State of Florida's demand for energy is rising and how deepwater oil and gas is important; therefore, we need more available supply.

Joey Fungy, representing BJ Sources and the National Ocean Industries Association, stated his support of the Draft EIS and Alternative A (the proposed lease sales). He is concerned with the stipulations that are in the Draft EIS. Since the stipulations are not rules and the Secretary of the Interior has the discretion to implement them or not, he agreed that they should remain in the Final EIS. The National Ocean Industries Association also submitted a comment letter that is presented in **Chapter 5.7.**, Letters of Comment on the Draft EIS and MMS's Responses.

Peter Velez, representing the American Petroleum Institute, stated his support for the Draft EIS, the proposed lease sales as they are in the Draft EIS, and Alternative A. He stated the Nation needs secure domestic supplies of oil and gas; these supplies can and are being developed with minimum impact to the environment, creating jobs and providing royalties. He supports national, state, and local conservation. He then discussed how the State of Florida's demand for energy is increasing and the several new natural gas pipelines that have been installed to Florida, yet Florida is against offshore oil and gas. He proposed that if there are no lease sales, the Nation will have to import more oil and gas, which it may not be able to do given the world situation. The American Petroleum Institute also submitted a comment letter that is presented in **Chapter 5.7.**

Mr. Velez, representing Shell Exploration & Production Company, stated that the Draft EIS covers vast environmental issues and supports the analysis in the Draft EIS and Alternative A. With respect to the military stipulations, he stated that Shell would work with them to fully comply. Shell Exploration & Production Company also submitted a comment letter that is presented in **Chapter 5.7.**

Mobile, Alabama, January 9, 2003

Lawrence Brough, representing the Mobile Bay Sierra Club, stated his support for Alternative B (no action). He discussed the need for security at OCS-related facilities both onshore and offshore. He then listed several issues and impacts that he felt the Draft EIS did not cover sufficiently: air quality, water quality, noise impacts, jellyfish, wetlands, transportation both to offshore and to onshore, socioeconomic impact of offshore development, and environmental justice.

Dean Peeler, representing the Alabama Petroleum Council and the American Petroleum Institute, reiterated the same comments as Peter Velez, representing the American Petroleum Institute. He also discussed how there is zero waste going overboard offshore; technology has enabled the industry to limit environmental impacts. He stressed how the industry is more environmentally aware and friendly. He closed by discussing the research the industry has done on the mercury issue – there are no impacts. The American Petroleum Institute also submitted a comment letter presented in **Chapter 5.7.**

Dr. Harland Johnson, representing himself as a retired engineer in both the onshore and offshore oil and gas industry, stated that he supports the proposed lease sales (Alternative A); the Nation, he said, needs the offshore energy supply because of increasing demand. He believes that conservation and alternative energy sources will help, but we will still need to rely on oil and gas. He is disappointed that the proposed lease sale area is so small; the proposed lease sales are so far from shore with negative impacts and little risk to coastal beaches. He believes the proposed lease sale area and the environmental issues included in the Draft EIS were covered too well; the Draft EIS is getting too large due to having to cover too many unnecessary issues.

Myrt Jones, representing herself, presented her book, *A Gadfly's Memoirs*, as testimony. She asked about hard bottoms in the sale area and then discussed how infrastructure in Alabama should be a concern since more offshore rigs will increase the onshore infrastructure, thereby increasing air quality problems

in coastal Alabama. She does not support more drilling. She stated that more drill waste cannot be dumped in the GOM. She then mentioned the *Mobile Register* articles on mercury in the waters (from OCS) and rivers (from refineries). She ended by stating that we needed more mass transit as an alternative to oil and gas. Ms. Jones also submitted two comment letters that are presented in **Chapter 5.7.**

Responses to these hearing comments have been incorporated into the responses to the letters of comment in **Chapter 5.7.**

5.6. MAJOR DIFFERENCES BETWEEN THE DRAFT AND FINAL EIS'S

Comments were received on the Draft EIS at the public hearings and via written and electronic correspondence. As a result of these comments, revisions were made to the Draft EIS. Most of the revisions were modifications or expansions of text to provide clarification on specific issues. These revisions are indicated in MMS's responses to letters of comment in **Chapter 5.7.** The major differences between the Draft and the Final EIS's are a result of activities that have occurred after the preparation of the Draft EIS.

The Lease Sale 181 Marine Protected Species Stipulations are now embodied in NTL 2003-G07, Vessel Strike Avoidance and Injured/Dead Protected Species Reporting, and NTL 2003-G06, Marine Trash and Debris Awareness and Elimination. The requirements of these NTL's apply to all existing and future oil and gas operations in the GOM OCS. A discussion of these NTL's has been added to **Chapter 1.5.**, Postlease Activities.

On, January 23, 2003, MMS issued NTL 2003-G03, Remotely Operated Vehicle (ROV) Surveys in Deepwater. The NTL extended ROV survey requirements for the WPA and CPA, grid areas 1-17, to a portion of the EPA, grid area 18, which encompasses the entire proposed lease sale area. The NTL requires ROV surveys and reports in water depths greater than 400 m. A discussion of these NTL's has been added to **Chapter 1.5.**, Postlease Activities.

Chapter 4.1.1.4.1., Drilling Muds and Cuttings, was expanded to include the analysis of fluids and cuttings from a deeper generic well reflecting the eight exploration plans that have been submitted from July 2002 to February 2003 in the proposed lease sale area. The estimated volumes of WBF and SBF and cuttings generated and discharged per depth are shown in **Table 4-8(b)**. While the generic well analyzed in the Draft EIS had a total depth of approximately 2,800 m (9,150 ft), the deep well design extends the drilling depth to approximately 5,900 m (19,400 ft). Analysis and conclusions denote this difference.

5.7. LETTERS OF COMMENT ON THE DRAFT EIS AND MMS'S RESPONSES

The NOA and announcement of public hearings were published in the *Federal Register* on November 22, 2002, and posted on the MMS Internet website. The Draft EIS was released on November 22, 2002. The comment period ended January 24, 2003. Comment letters were received from the following:

Federal Agencies

U.S. Department of the Interior, Fish and Wildlife ServiceU.S. Environmental Protection Agency, Region 4

State Agencies and Representatives

Alabama
Alabama Historic Commission

Florida

Department of Environmental Protection

Louisiana

The Honorable N.J. Damico, House of Representatives
The Honorable Wilfred Pierre, House of Representatives
Department of Natural Resources

Texas

Texas General Land Office, Coastal Coordination Council Organizations and Associations

American Petroleum Institute
Domestic Petroleum Council
Independent Petroleum Association
of America
International Association of Drilling
Contractors
National Ocean Industries Association
Natural Gas Supply Association
United States Oil and Gas Association
Whale and Dolphin Conservation Society

Industry

Murphy Exploration & Production Company Shell Exploration & Production Company

General Public

David Bogan Myrt Jones

Copies of these comment letters and MMS's responses follow.

5.7.1. Comments Noted Letters

Letters from the following were received and their comments noted by MMS:

State of Louisiana, House of Representatives, The Honorable N.J. Damico;

State of Louisiana, House of Representatives, The Honorable Wilfred Pierre;

State of Alabama, Alabama Historic Commission;

Texas General Land Office, Coastal Coordination Council;

American Petroleum Institute;

Domestic Petroleum Council;

Independent Petroleum Association of America;

International Association of Drilling Contractors;

National Ocean Industries Association;

Natural Gas Supply Association;

United States Oil and Gas Association;

Murphy Exploration and Production Company; and

David Bogan.

Copies of these letters are presented on the subsequent pages.



5201 Westbank Expressway • Suite 201 Martero, Louisiana 70072 Telephone: (504) 349-8840 Fax: (504) 349-8780 Baton Rouge: (225) 342-0347

149.4840 STATE OF LOUISIANA 149.8780

HOUSE OF REPRESENTATIVES

N. J. DAMICO District 84 Chairman, Environment Committee

Legislative Assistant: Frances Falcone East

January 17, 2003

Mr. Chris Oynes, Regional Director Minerals Management Service Gulf of Mexico Region 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123

Dear Mr. Oynes:

I am Representative N. J. Damico, Chairman of the Louisiana House of Representatives Environment Committee and a Louisiana legislator representing House District 84, and I write this letter to strongly support Lease Sales 189 and 197, scheduled for the Eastern Gulf of Mexico (EGOM), in accordance with the MMS 5-Year Leasing Plan for 2002-2007. I am aware that these lease sales are the subject of the Draft Environmental Impact Statement (DEIS) for which this comment period has been established. The DEIS is, as usual, complete and comprehensive and certainly supports the fact that oil and gas exploration and production can be conducted in the EGOM in an environmentally sensitive manner.

Studies by the Department of Energy attest to the unfortunate fact that the United States may well be approaching another energy crisis due to projected demand and decreasing domestic supply. Natural gas, upon which Louisiana's economy is increasingly dependent, is of particular concern. Ironically, natural gas demand in Florida is projected to increase by 140% over the next 20 years. It has been Louisiana, and the areas of the Gulf of Mexico off Louisiana's coast, which has supplied much of Florida's natural gas demand for the historical past. Now, it is imperative that access be encouraged in the EGOM and others areas heretofore off limits to oil and gas activity in this country.

As a House Representative representing constituents directly impacted by the outcome of these future sales and as Chairman of the House Environment Committee, I strongly urge the MMS to proceed with the planned lease sales for the EGOM as outlined in the most recent MMS 5-year Plan.

Thank you.

Sincerely,

N. J. Damico

Jack D. Smith

Vice Chairman

LOUISIANA HOUSE OF REPRESENTATIVES



Wilfred Pierre Chairman

Committee on Natural Resources

P. O. Box 44486 Baton Rouge, LA 70804-4486 (225) 342-2402 Fax: (225) 342-0464

16 January 2003

Mr. Chris Oynes, Regional Director Minerals Management Service, Gulf of Mexico Region 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123

Dear Mr. Oynes:

I am Representative Wilfred Pierre, Chairman of the Louisiana House of Representatives Natural Resources Committee and a Louisiana legislator representing House District 44 in the city of Lafayette. I write this letter to indicate strong support for Lease Sales 189 and 197 scheduled for the Eastern Gulf of Mexico (EGOM) in accordance with the MMS 5-Year Leasing Plan for 2002-2007. I am aware that these lease sales are the subject of the Draft Environmental Impact Statement (DEIS) for which this comment period has been established. The DEIS is, as usual, complete and comprehensive and certainly supports the fact that oil and gas exploration and production can be conducted in the EGOM in an environmentally sensitive manner.

Studies by the Department of Energy attest to the unfortunate fact that the United States may well be approaching another energy crisis due to projected demand and decreasing domestic supply. Natural gas, upon which Louisiana's economy is increasingly dependent, is of particular concern. Ironically, natural gas demand in Florida is projected to increase by 140% over the next 20 years. It has been Louisiana, and the areas of the Gulf of Mexico off Louisiana's coast, which has supplied much of Florida's natural gas demand for the historical past. Now, it is imperative that access be encouraged in the EGOM and others areas heretofore off limits to oil and gas activity in this country.

As a state legislator representing constituents directly impacted by the outcome of these future sales and as chairman of the Louisiana House Committee on Natural Resources, I strongly urge the MMS to proceed with the planned lease sales for the EGOM as outlined in the most recent MMS 5-year Plan.

Thank you for your consideration of this matter.

Sincerely

Wilfred Pierre Chairman



STATE OF ALABAMA ALABAMA HISTORICAL COMMISSION

468 SOUTH PERRY STREET MONTGOMERY, ALABAMA 36130-0900

December 18, 2002

LEE H. WARNER
EXECUTIVE DIRECTOR

TEL: 334-242-3184 FAX: 334-240-3477

Minerals Management Service Gulf of Mexico OCS Region Office of Leasing and Environment Attn: Regional Supervisor (MS 5410) 1201 Elmwood Park Blvd.

New Orleans, LA 70123-2394

Re: AHC 02-0153; Notice of Availability of Draft Environmental Impact Statement and Locations and Dates of Public Hearings on Proposed Eastern Planning Area Lease Sales189 and 197

Dear Mr. Sir or Madam:

The Alabama Historical Commission is in receipt of the above referenced document. Thank you for forwarding this notice; we will add it to our files. We concur with the Draft EIS provided the Section 106 process is carried out for each project, as stated in the document. Please keep us informed of any changes in this project.

We appreciate your commitment to helping us preserve Alabama's non-renewable resources. Should you have any questions, please contact Amanda McBride of this office and include the AHC tracking number referenced above.

Very truly yours,

Elizabeth Ann Brown

Deputy State Historic Preservation Officer

EAB/ALM/alm

DEC 2 3 2002

LEASING & ENVIRONMENTAL

MS 5400

THE STATE HISTORIC PRESERVATION OFFICE www.preserveala.org



Coastal Coordination Council

Chairman

David Dewhurst

Texas Land Commissioner



Members

Michael L. Williams

Railroad Commission of Texas

Dr. William H. Clayton

Coastal Government Representative

John Barrett

Agriculture Representative

Bob Dunkin

Coastal Business Representative

Jack Hunt

Texas Water Development Board

Robert J. Huston

Texas Commission on Environmental Quality

John W. Johnson

Texas Transportation Commission

Elizabeth A. Nisbet

Coastal Resident Representative

Robert R. Stickney

Sea Grant College Program

Donald Swann

Texas State Soil & Water Conservation Board

Mark E. Watson, Jr.

Parks & Wildlife Commission of Texas



Diane P. Garcia

Council Secretary

Permit Service Center 1-866-894-3578 December 3, 2002



Mr. Chris C. Oynes U.S. Dept. of the Interior Minerals Management Service Gulf of Mexico OCS Region 1201 Elmwood Park Blvd. New Orleans, LA 70123-2394

Re: MS 5410 - Draft EIS for Proposed Lease Sale 189 and 197

Thomas R. Colnon

Dear Mr. Oynes:

It has been determined that the project referenced above is outside the Texas Coastal Management Program (CMP) boundary. Therefore, it is not subject to consistency review under the Texas CMP.

Sincerely,

Thomas R. Calnan

Consistency Review Coordinator Texas General Land Office

TRC/dac

ot less tours. In certifierd, that the publical schemerad aboves in exteste sing sites since One-tall climage amend insignant (Old 19) including colliborations; it is not at tipos to contribute and access section that it exist Object.















January 24, 2003

Mr. Chris Oynes, Regional Director Gulf of Mexico OCS Region Minerals Management Service (MS-5410) 1201 Elmwood Park Boulevard New Orleans, Louisiana, 70123-2394

Comments submitted via email to: environment@mms.gov

Comments by the American Petroleum Institute, Domestic Petroleum Council, Independent Petroleum Association of America, International Association of Drilling Contractors, Natural Gas Supply Association, National Ocean Industries Association, and United States Oil and Gas Association on the Draft Environmental Impact Statement (EIS) for the Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197; FR 70455 (November 22, 2002)

Dear Mr. Oynes

We are pleased to comment on the Draft Environmental Impact Statement on the proposed Gulf of Mexico Eastern Planning Area OCS oil and gas lease sales 189 and 197. These comments represent the views of the American Petroleum Institute, Domestic Petroleum Council, Independent Petroleum Association of America, International Association of Drilling Contractors, Natural Gas Supply Association, National Ocean Industries Association, and the U.S. Oil and Gas Association. These seven national trade associations represent thousands of companies, both majors and independents, engaged in all sectors of the U.S. natural gas and oil industry, including exploration, production, distribution, marketing, equipment manufacture and supply, and other diverse offshore support services. A significant percentage of domestic oil and gas production or associated activities by members if these associations comes from the Gulf of Mexico and other offshore areas. Accordingly, we take an active interest in the Minerals Management Service's (MMS) preparation of this statement, as part of the five-year Outer Continental Shelf (OCS) leasing program for 2002-2007.

A key challenge faced by the U.S. is how to enhance energy security and meet expected future demand for oil and natural gas. Sales 189 and 197 can play a role in meeting that

challenge and we fully support Alternative A which offers for lease all unleased blocks within the proposed lease sale area.

The Gulf of Mexico is a major source of oil and gas, providing 27 percent of domestic oil production and 25 percent of domestic natural gas production. However, the Gulf of Mexico cannot continue to be a source of secure energy unless leasing, exploration, and production are allowed to take place in all areas. The area under consideration for leasing is principally in deepwater and directly on trend with a number of major deepwater discoveries made just to the west of the area, in the easternmost portion of the Central Gulf. The MMS estimates conservatively that the area to be leased in Sales 189 and 197 together hold 605 billion cubic feet of natural gas and 150 million barrels of oil, enough gas to heat the homes of one million U.S. households for 7 years and enough oil to fuel one million automobiles for 5 years.

The nation needs to develop secure domestic energy supplies to help reduce dependence on foreign oil. By adopting Alternative A, the MMS can help the nation meet the challenge of enhancing energy security and meeting future energy demand. Thanks to advances in exploration and production technology, the oil and natural gas industry can produce these vital resources with minimal impact on the environment. For example, state-of-the-art seismic imaging would pinpoint oil and gas-bearing rock formations resulting in less drilling and horizontal drilling would mean fewer platforms.

Developing lease sale areas 189 and 197 would help continue the substantial economic benefits associated with the offshore industry. Development would help maintain jobs in companies operating offshore and in other companies that provide supplies and services to the operating companies and in nearby communities sustained by industry workers spending their wages.

Development would contribute to offshore royalties paid to the federal government. Between 1953 and 2000, direct revenues from federal offshore oil and gas leases, primarily from the Gulf, totaled over \$133 billion, with a portion going into the nation's Land and Water Conservation Fund for use by local, state, and federal agencies. Since 1965, offshore activity has provided more than \$20 billion to that fund.

We appreciate the opportunity to provide comments on this important document. With the nation's growing energy needs, developing new supplies is essential to the America's welfare, security, and economic progress.

If you have any questions, please contact Linda Bauch of API's Upstream Department at (202) 682-8170.

Sincerely,

American Petroleum Institute Domestic Petroleum Council Liun J. Hunger J.	Betty Anthony	W. Whall
Independent Petroleum Association of America International Association of Drilling Contractors Contractors National Ocean Industries Association Natural Gas Supply Association	American Petroleum Institute	Domestic Petroleum Council
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	National Ocean Industries Association	Natural Gas Supply Association
US Oil & Gas Association	Alter Moder	
	US Oil & Gas Association	



131 SOUTH ROBERTSON ST. (70112) P.O. BOX 617BO NEW ORLEANS, LA 70161-17BO (504) 561-2811 FAX (504) 561-2837

January 12, 2003

Mr. Chris Oynes, Regional Director Gulf of Mexico OCS Region Minerals Management Service (MS-5410) 1201 Elmwood Park Boulevard New Orleans, Louisiana, 70123-2394

Comments by the Murphy Exploration & Production Company on the Draft Environmental Impact Statement (EIS) for the Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197; FR 70455 (November 22, 2002)

Dear Mr. Oynes

We are pleased to comment on the Draft Environmental Impact Statement on the proposed Gulf of Mexico Eastern Planning Area OCS oil and gas lease sales 189 and 197. Our parent company, Murphy Oil Corporation, is active in all sectors of the U.S. natural gas and oil industry, including exploration, production, distribution, and marketing. A pioneer in the domestic offshore oil and natural gas business, a significant percentage of Murphy's world-wide E&P activities take place in the Gulf of Mexico and will continue to do so in the future. Accordingly, we take an active interest in the Minerals Management Service's (MMS) preparation of this statement, as part of the five-year Outer Continental Shelf (OCS) leasing program for 2002-2007.

We agree with the comments offered by the American Petroleum Institute when they say that a key challenge faced by the US is how to enhance energy security and meet expected future demand for oil and natural gas. If allowed to take place under reasonable regulations and conditions as in Alternative "A", Sales 189 and 197 will play a role in meeting that challenge.

The Gulf of Mexico is one of the world's premier oil and gas provinces, but the areas which have been developed historically cannot continue to be the sole offshore source of secure energy for the United States unless leasing, exploration, and production are allowed to take place in frontier areas. The area presently under consideration for leasing is principally in deepwater and directly on trend with a number of major deepwater discoveries made in the areas to the west where past sales have taken place. Especially in this time of international instability, America needs the 105 billion cubic feet of natural gas and 150 million barrels of oil, which the Government estimates are waiting to be discovered in this area.

Any action to curtail the extent of the area leased will threaten our ability to develop secure domestic energy supplies to help reduce dependence on foreign oil. By adopting Alternative A, the MMS can help the nation meet the challenge of enhancing energy security and meeting future energy demand. Thanks to cooperative efforts between industry and Government as well as advances in exploration and production technology, this oil and natural gas can be produced without fear of adverse impacts on the



environment. In fact, oil and gas platforms in the Gulf and elsewhere have been found to act as reefs and actually promote and enhance marine life.

Developing lease sale areas 189 and 197 will help continue the substantial economic benefits associated with the offshore industry at a time when unemployment is of great concern. Development would help maintain high-paying, domestic jobs in companies operating or supporting offshore and increase royalties paid to the federal government. In addition, significant portions of the offshore royalty money end up going into the Land and Water Conservation Fund for use by local, state, and federal agencies.

We appreciate this opportunity to provide comments on this essential component of our nation's effort to meet our ever-growing energy needs. Should you have any questions, please contact the undersigned at (504) 561-2449 or chuck_bedell@murphyoilcorp.com.

Sincerely,

Charles a. Bediel

Charles A. Bedell, Manager Environment & Government Affairs **From:** David/Dove Bogan [mailto:dndbogan@msn.com]

Sent: Thursday, January 09, 2003 7:00 PM

To: environment@mms.gov

Subject: Additional drilling in the Gulf of Mexico

Dear Sirs,

I would like to go on record as **opposing** any additional lease sales in the Gulf of Mexico! It is my experience that any additional lease sales would hurt our environment, economy and way of life.

Thankyou,

David Bogan 2630 East Bayshore Road Gulf Breeze, Florida

5.7.2. Comment Letters and MMS Responses

Letters from the following were received and their comments responded to by MMS:

United States Department of the Interior, Fish and Wildlife Service;

United States Environmental Protection Agency, Region 4;

State of Alabama, Historic Commission;

State of Florida, Department of Environmental Protection;

State of Louisiana, Department of Natural Resources;

Whale and Dolphin Conservation Society;

Shell Exploration & Production Company; and

Myrt Jones.

Copies of these letters are presented on the subsequent pages. Each letter's comments have been marked for identification purposes. The MMS's responses immediately follow each relevant letter. For handwritten letters, a typed version follows the copy of the original letter.



United States Department of the Interior

FISH AND WILDLIFE SERVICE 1875 Century Boulevard Atlanta, Georgia 30345

JAN 2 7 2003

In Reply Refer To: FWS/R4/ES



Memorandum

To:

Regional Director, Minerals Management Service, New Orleans, Louisiana

From: for Regional Director, Southeast Region

Subject:

Review of Draft Multisale EIS for Proposed Sales 189 and 197 in the Eastern Gulf

of Mexico (ER 02/0051)

The Southeast Region has reviewed the subject document and offers the following comments. A single Environmental Impact Statement (EIS) is being prepared for two proposed Eastern Gulf of Mexico outer continental shelf lease sales scheduled in the current Outer Continental Shelf Oil and Gas Leasing Program (2002-2007). Although this EIS addresses both proposed lease sale actions, lease sale 189 is scheduled for 2003 and lease sale 197 is scheduled for 2005. Formal consultation in accordance with section 7 of the Endangered Species Act for both sale actions is in progress.

The document is well written and adequately describes the existing fish and wildlife resources and their habitats in the Gulf of Mexico. The draft EIS also adequately addresses the potential impacts of outer continental shelf oil and gas activities on fish and wildlife resources. The Fish and Wildlife Service has informally provided updates to Minerals Management Service Gulf of Mexico Region staff concerning official and ecological status of federally listed species in the action area.

1. Executive Summary: The potential impacts of the proposed action and the final determination of affect in accordance with the Endangered Species Act for federally listed species should be presented together in one section of the Summary. Each species with its common and scientific names should be identified in the discussion.

2. Page 3-44, Loggerhead Sea Turtle (Caretta caretta), 2nd paragraph: Satellite tags were also placed on three female adult loggerheads after they finished nesting on Cape San Blas, St. Joseph Peninsula, Gulf County, Florida in 1999. Information regarding their migrations can be found at: www.cccturtle.org/sat1.htm.

3.a. <u>Description of the Affected Environment</u>, 3.2.5 Alabama, Choctawhatchee, St. Andrew, Perdido Key Beach Mice, and Florida Salt Marsh Vole, Page 3-47, 1st paragraph, 2nd sentence: Reword the sentence to read "Five Gulf coast subspecies, the Alabama, Choctawhatchee, Perdido

FWS-3B CONT'D

Key, and St. Andrew beach mice are federally protected and occupy coastal mature dunes of Florida and Alabama."

%S 3C

3.b. <u>Page 3-47, 1st paragraph, 3rd sentence</u>: Delete this sentence or replace with "The status of these five subspecies has stabilized in the past few years."

WS-3C

3.c. <u>Page 3-47, 1st paragraph, 4th sentence</u>: Reword the sentence to read "The Alabama subspecies occurs in Alabama; the Perdido Key subspecies occurs in Alabama and Florida; and the Choctawhatchee and St. Andrew subspecies occur in Florida.

WS-3D

3.d. <u>Page 3-47, 1st paragraph, 5th sentence</u>: Reword the sentence to read "The Alabama, Choctawhatchee, and Perdido Key beach mice were listed as endangered species in <u>1985</u>. Critical habitat was designated for all three subspecies at the time of listing." The reference to critical habitat could be deleted since it is discussed in a subsequent section.

WS-3E

3.e. <u>Page 3-47</u>, 1st paragraph, 6th sentence: Reword the sentence to read "The St. Andrew beach mouse was listed as endangered in 1998; no critical habitat was designated for the subspecies because it would not benefit the conservation of the species." The reference to critical habitat could be deleted since it is discussed in a subsequent section.

WS-3F

3.f. <u>Page 3-47, 1st paragraph, 7th sentence</u>: Increase the miles of occupied shoreline to 39.9 miles. The distribution of Choctawhatchee beach mice has increased by 6 miles and the Perdido Key beach mice has increased 1.6 miles.

FWS-3G

3.g. <u>Page 3-47, 1st paragraph, 9th sentence</u>: Reword the sentence to read "The recovery of beach mice continues to be hampered by multiple habitat threats over their entire range (coastal development and associated human activities, military activities, coastal erosion, and weather events.)"

WS-3H

3.h. <u>Page 3-47, Diet, first paragraph, 2nd sentence</u>: insert the word "seasonal" before the word "availability."

FWS-3I

3.i. Page 3-48, Range and Populations, 2nd and 3rd paragraphs: Replace both paragraphs with: "The Choctawhatchee beach mouse's current distribution can be considered to consist of four populations: Topsail Hill Preserve State Park (and adjacent eastern and western private lands), Shell Island (includes St. Andrew State Park with private inholdings and Tyndall Air Force Base), Grayton Dunes (and adjacent eastern private lands) and West Crooked Island. Approximately 99.8 percent of the lands known to be occupied by CBM are public lands. In addition, approximately 92 percent of habitat "available" (large enough to support a population or adjacent to a population) for the CBM are public lands. A current conservative total population estimate would be in the range of 600 to 1,000 CBM."

2

WS-3J

3.j. <u>Page 3-48, Range and Populations, 4th paragraph, 1st sentence</u>: Replace "Old Pass (East) with "St. Andrew Sound inlet."

WS 3K 3.k. <u>Page 3-49</u>, <u>General Habitat and Critical Habitat</u>, 3rd paragraph, 2nd sentence: Replace the words "Choctawhatchee beach mouse" with "three subspecies."

-3L

3.l. <u>Page 3-49, General Habitat and Critical Habitat, 3rd sentence</u>: Delete the first part of the sentence, starting the sentence with "The major..."

3M 3M 3.m. <u>Page 3-49, General Habitat and Critical Habitat, 5th paragraph</u>: Move the entire paragraph to the Range and Populations section on pages 3-48 and 3-49.

FWS -3N 3.n. <u>Page 3-50, Tropical Storms and Hurricanes, 1st paragraph, 1st sentence</u>: Delete the words "the" and replace the word "mouse" with "mice."

FWS-30

3.o. <u>Page 3-50</u>, <u>Tropical Storms and Hurricanes</u>, 1st <u>paragraph</u>, <u>2nd sentence</u>: Delete the sentence, as written, it implies that storms themselves cause beach mouse population declines. It is the reduction and fragmentation of habitat that affects the ability of beach mice to recover following storms.

WS-3P

3.p. <u>Page 3-50, Tropical Storms and Hurricanes, 4th paragraph, 2nd sentence</u>: Insert the words "have recovered," before "are either recovering."

WS-3Q

3.q. Page 3-51, Reasons for Current Status, 1st paragraph, 6th sentence: Insert the words "introduction of non-native predators," before the words "and destruction" and replace the words "has increased the threat of extinction of several" with the words "continues to hamper the recovery."

WS-4A

4.a. <u>Page 3-52, 3.2.6.2</u>. Endangered and Threatened Species, Bald eagle, 1st paragraph, 6th sentence: Replace the sentence with "There are no bald eagle nests within the coastal area of Louisiana (D. Fuller, FWS, personal communication, 2002)." According to the Florida Fish and Wildlife Conservation Commission there were approximately 125 bald eagle nests within 5 miles of the coast from the Alabama state line to Tampa, Florida during the 2001 nesting season (www.wildflorida.org/eagle/eaglenests). The majority of the nests were found from Gulf County, east to Sarasota County.

WS-4I

4.b. <u>Page 3-52, 3.2.6.2</u>. <u>Endangered and Threatened Species, Bald Eagle, 1st paragraph, last sentence</u>: Add to the sentence "and proposed delisting the bald eagle in the same area in 1999 (64 FR 36453).

WS-5A

5.a. <u>Page 3-53, 3.2.7.1. Endangered and Threatened Fish, Gulf Sturgeon, 3rd paragraph, 4th sentence</u>: Insert the word "to" between the words "Louisiana" and "the."

WS-5B

5.b. <u>Page 3-54, 3.2.7.1.</u> Endangered and Threatened Fish, Gulf Sturgeon, 3rd paragraph, 7th sentence: Replace the sentence with: "Estimates have been completed recently for the Suwannee, Apalachicola, Pascagoula, West Pearl, and Choctawhatchee Rivers, and the second year of a 3-year study is underway on the Yellow River, and the first year of a 3-year study is underway on the Escambia River."

5-7A FW

6. Page 4-83, 4.2.1.7. Impacts on Alabama, Choctawhatchee, St. Andrew, Perdido "Kee" Beach Mice, and Florida Salt Marsh Vole: Replace the word "Kee" with the word "Key."

7.a. <u>Page 4-156, 4.4.8. Impacts on Coastal and Marine Birds, 1st paragraph, 1st sentence</u>: Insert the word "with" in between the words "associated" and "proposed."

WS-7B

7.b. <u>Page 4-159, 4.4.8. Impacts on Coastal and Marine Birds, Summary and Conclusions:</u> A definitive summary for each of the federally listed birds (piping plover, bald eagle, and brown pelican) should be included in the summary.

VS-7C

7.c. <u>Page 4-212, 4.5.8. Impacts on Coastal and Marine Birds, Summary and Conclusions:</u> A definitive summary for each of the federally listed birds (piping plover, bald eagle, and brown pelican) should be included in the summary.

WS-8

8. <u>Page 4-212, 4.5.9.1. Impacts on Endangered and Threatened Fish, Gulf Sturgeon, Summary and Conclusions</u>: We have no evidence yet of a continuing decline in sturgeon numbers from which to project such a trend. While habitat degradation is a concern, it is not as serious as this statement may imply.

6-SM

9. Volume II, Figures and Tables, page 44, Figure 4-25: The range maps for the beach mice should be revised as follows: 1) a separation between the ranges of the Alabama and Perdido Key beach mice should be indicated at Perdido Pass; 2) the range of the Perdido Key beach mouse should cover only the island of Perdido Key; 3) the range of the Choctawhatchee beach mouse should be extended west to East Pass at Destin, Florida and east to cover West Cooked Island; and 4) the range of the St. Andrew beach mouse should be extended west to cover all of East Crooked Island, separated between St. Joe Beach and the tip of St. Joseph Peninsula, and extended south and east to cover all of the peninsula.

5

WS-10

10. <u>Volume II</u>, <u>Figures and Tables</u>, <u>page 45</u>, <u>Figure 4-26</u>: The figure implies that the snowy plover only occurs in these habitats during the nesting season. However, the snowy plover occurs year-round in these habitats.

WS-11

11. <u>Oil-Spill Risk Analysis</u>, page 5, 2nd paragraph, offshore waters: One marine league equals 18,228.3 feet.

FWS-12

12. Oil-Spill Risk Analysis, page 5, Listing of Environmental Resources: The snowy plover is not federally listed in the states of Texas, Louisiana, Mississippi, Alabama, and Florida. Its status is currently under review. The list implies that the snowy plover only occurs in coastal habitats during the nesting season. However, the snowy plover occurs year-round in these habitats.

WS-13

13. Oil-Spill Risk Analysis, page 5 Figure 13: The figure implies that the snowy plover only occurs in these habitats during the nesting season. However, the snowy plover occurs year-round in these habitats.

We appreciate the opportunity to comment on the application. Please call Kevin Moody, Regional Environmental coordinator, at 404/679-7089 with any questions or comments.

Fish and Wildlife Service

The Minerals Management Service believes that changing the format of the Executive Summary, as suggested, would result in an unnecessary duplication of information and goes against the very definition of a summary. Each relative federally listed endangered specie has been analyzed and its potential impacts discussed (under both its common and scientific name) in Chapters 4.2., 4.4., and 4.5., with a summary of impacts appearing in Chapter 2.3.1.2.

FWS-2 The referenced information was added to **Chapter 3.2.4.**, Sea Turtles.

FWS-3A through FWS-3Q

The referenced text in **Chapter 3.2.5.**, Alabama, Choctawhatchee, St. Andrew, and Perdido Key Beach Mice, and Florida Salt Marsh Vole, has been changed accordingly.

FWS-4A through FWS-4B

The referenced text in Chapter 3.2.6.2., Endangered and Threatened Species, has been changed accordingly.

FWS-5A through FWS-5A

The referenced text in **Chapter 3.2.7.1.**, Gulf Sturgeon, has been changed accordingly.

FWS-6 The referenced text in Chapter 4.2.1.7., Impacts on the Alabama, Choctawhatchee, St. Andrew, and Perdido Key Beach Mice, and Florida Salt Marsh Vole, has been changed accordingly.

FWS-7A through FWS-7B

The referenced text in **Chapter 4.4.8.**, Impacts on Coastal and Marine Birds, has been changed accordingly.

- **FWS-8** The referenced text in **Chapter 4.5.9.1.**, Gulf Sturgeon, has been changed accordingly.
- FWS-9 For the Oil Spill Risk Assessment model, all onshore environmental resource locations were represented by one or more partitions of the coastline (approximately 10 kilometers (km) each). Figure 4-25 depicts the ranges for the subspecies of beach mouse based on the 10 km partitions. These segments are not exactly representative of the end points of the range of each subspecies; however, these discrepancies fall within the resolution of the model.
- The year-round probability of a spill greater than or equal to 1,000 barrels occurring and contacting snowy plover habitat within 10 days is 1 percent and within 30 days is 2 percent. **Figure 4-26**, **Table 4-34**, and **Chapter 4.4.8.**, Impacts on Coastal and Marine Birds, have been changed accordingly.
- This comment refers to a separate report, Oil-Spill Risk Analysis: Gulf of Mexico Outer Continental Shelf (OCS) Lease Sales, Eastern Planning Area, 2003-2007 and Gulfwide OCS Program, 2003-2042 (USDOI, MMS, 2002c), which contains the detailed results of the oil spill runs used in this environmental impact statement. This comment has been forwarded to the authors of this report.
- **FWS-12** See response to FWS-11.
- **FWS-13** See response to FWS-11.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

January 24, 2003



4EAD/OEA

Mr. Chris Oynes Regional Director (MS-5410) Minerals Management Service, Gulf Region 1201 Elmwood Park Boulevard New Orleans, LA 70123-1703

RE: Gulf of Mexico Lease Sales 189 and 197 Eastern Planning Area Draft Environmental Impact statement MMS-EO-2012-00; CEQ-020482



Dear Mr. Oynes:

USEPA-1

EPA, Region 4 has reviewed the referenced Draft Environmental Impact Statement (DEIS) and is providing comments to Minerals Management Service (MMS) in accordance with Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. The DEIS provides an evaluation of a proposed action to offer 138 blocks offshore Alabama and Florida. The first sale would occur in 2003 and a second sale would occur in 2005 with the number of blocks dependant on the results of the first sale. The proposed Eastern Planning Area sale would offer leases in a prescribed portion of the planning area beginning 93 miles offshore of Gulf Shores, Alabama and extend seaward. Water depths at the lease sale area range from 1600 to 3000 meters deep.

PURPOSE OF THE PROPOSED ACTION

SEPA -2

USEPA-3

The MMS estimates potential resources of 65-85 million barrels of oil and 0.265-0.340 trillion cubic feet of natural gas to be obtained over a 40-year time frame. The document does not define the number of lease blocks expected to be leased and their location within the lease area. This information would better define the required gathering system and transport for the resource. The document identifies the nation's need for oil and gas and particularly states that use of natural gas is expected to increase significantly in the coming years. While the complete rationale for the lease sale is not presented in this document, a complete discussion of the need for the leasing is presented in the MMS 5-Year Lease Plan EIS. One alternative, not holding the lease sale, is presented but not fully analyzed.

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ENVIRONMENTAL CONSEQUENCES

Beginning with the previous Lease Sale 181 new leasing within the Eastern Planning Area is greatly reduced from the original proposal which extended the sale area to within 15 miles offshore of Alabama. This change greatly reduced the potential environmental affects from routine operations to manmade and natural resources along the northeast Gulf coast. The trend toward activities in deeper waters of the Eastern Planning Area appears consistent with the industry's greater activity in deeper portions of the Gulf in the Central and Western Planning areas. Oil and gas exploration and production farther from shore, however, require more complex technology or these activities and more difficult gathering and transport of product to shore. We believe this increases the potential for accidents but in the very deep marine environments far from sensitive coastal marine resources. Numerous operational alternatives available to the industry for use in the deep Gulf are discussed making the document complex but quite informative.

Very few changes in the required onshore support infrastructure are anticipated as a result of the proposed lease sale. While additional support vessel trips are expected, they would not result in the need for new port facilities. Likewise, no additional onshore treatment and refining capacity for oil and gas is required. EPA does not have major concerns about adverse impacts to upland and the near shore environment by the proposed action.

1. Pollutant Discharges

The potential impacts of the use of drilling fluids is discussed in section 4.1.1.4.1. MMS references Neff et. al. 2000, which states that degradation of SBF should require 2-3 years. This statement should be qualified further since there could be significant differences in degradation rates based on the temperature differences at the sea bottom between shallow and deep sea drilling locations. It is further stated that for sites in deep water the upper portion (1,000-1,500m) of the wells would be drilled with water-based drilling fluids (WBF) and the remainder to total well depths would use synthetic-based fluids (SBF). Table 4-8 is referenced and states that the upper portion of wells drilled with WBF would be 800-2,800m. Please clarify this discrepancy. And finally, Table 4-8 indicates average total well depths to be 2,800m below seafloor. However, major operators have told EPA that well depths within the lease area are expected to be 6,098-7,622m. Reasonably anticipated well depths for the lease area should be utilized in the environmental assessment work since they greatly affect the estimated quantities of pollutants discharged.

Bioaccumulation of mercury is a concern to public health relative to the consumption of fishery products from the Gulf of Mexico. This topic is addressed in section 4.1.1.4. Drilling fluids and produced waters contain mercury and elevated mercury levels have been documented near certain oil and gas offshore facilities. Drilling fluids and produced water discharges have been demonstrated to cause toxic conditions within the immediate vicinity of the discharges.

There is ongoing MMS-sponsored studies addressing the fate and effects of these discharges with a focus on SBF. EPA is anxious to obtain any interim or final results of these studies. While we USEPA-8 concur with the text that elevated levels of methylmercury have been found in fish and marine mammals, we could not find the citation on page 4-19 (USEPA, 1997) to which it is attributed.

USEPA-9 ■ Some additional closure is needed regarding bioaccumulation cumulatively Gulf-wide.

2. Pipelines

USEPA-10

Section 4.1.1.3.3.3 states that MMS regulations require all pipelines laid in waters deeper than 200m to be buried. In chapter 3 it is noted that the Gulf Marine Fisheries Management Commission has a "Generic Amendment" prescribing that pipelines within Essential Fish Habitat on the continental shelf be buried in waters less than 300 feet deep. There should some discussion or rationale given for such regulations or recommendations. Text is missing on this topic on page 3-67.

Four new pipelines are anticipated as part of the proposed action. They would connect to other pipelines shoreward so no new landfalls are anticipated. These pipelines would be used to transport product according to the document on p-4-27. In most pipelines proposed in lease areas closer to shore, there are bundled multiple pipes and some are for conveying fluids (i.e. fuels, corrosion inhibitors, etc.) seaward to the production site. The industry's added difficulties in moving liquid and gaseous product through the very deep and cold environment are discussed. The "bundling" of pipelines should be discussed, as should the "merging" of new with existing pipelines.

USEPA-13

We note on page 3-65 the acknowledgment that hard bottom and high relief marine resources are not well documented within the eastern Gulf of Mexico. Proposed pipelines would be quite long and traverse varied habitats. While the Pinnacle Trends are not within the lease area, pipelines could be proposed in the vicinity of these or other high value marine habitats. It is therefore very important that adequate surveys be conducted well in advance of proposed pipeline construction. We assume there would be live bottom surveys even though the probable depth of many pipeline routes exceed the depth where MMS requires these surveys. EPA wishes to be involved in the review of surveys, whether they are conducted by MMS or by industry. Since there is potential for sharing pipeline capacity by multiple production facility operators, third party owner/operators of pipelines is possible. MMS should assess such proposals as carefully as pipelines associated with production plans, and require plans to evaluate alternative routes and require plans to be submitted well in advance of projected construction.

3. Accidents

The document states in Section 4.3.1, that MMS has considerable uncertainty about the number of OCS spills assumed to occur. Reasons for this uncertainty are not discussed. The probabilities of offshore spills are estimated and the tabular data indicate that small and large

-3-

4_

SEPA-17

spills are more likely from pipelines than from drilling and production sites. Therefore, attention to ways of lessening pipeline accidents is warranted including how leaks are detected and limited.

SEPA-18

Regarding drilling operations, it is unclear whether existing accident data or other data could be used to discern the probabilities of spills as a function of (1) the sub-sea depth of wells drilled, and (2) the depth of water where drilling and or production occur. Deep water operations would seem to be more likely to result in greater numbers of accidents and would present greater challenges in the control of liquid and gas products.

OTHER COMMENTS

USEPA-19

1. The document in Chapter 2 indicates that chemosynthetic marine communities have been missed in past survey work. The accuracy of such technology for deep ocean surveys should be discussed. Also, it is noted that MMS requires avoidance of chemosynthetic communities but does not define the setback distances.

2. Chapter 2 states the impact of the proposed action on fish as 1 percent decrease in standing stocks. How is such an estimate of impact derived and how is it related to total populations?

USEPA-22

3. Mitigation for fishery impacts is discussed in the Affected Environment chapter but would be more appropriate if it were discussed in a separate mitigation section related to environmental consequences.

SEPA-23

4. EPA's NPDES permitting is discussed in Section 4.1.1.4. Please note that EPA Region 4 may allow wastewater discharges within 1,000 m of Areas of Biological Concern after a comprehensive individual permit review, but not for facilities desiring coverage by the General

SUMMARY

Thank you for providing the DEIS for review. EPA is rating the proposed action LO (Lack of Objections), meaning our review has not identified any potential impacts of the Proposed Action (lease Sale) requiring substantive changes. Concerns exist, however, regarding the fate and effects of the contributions of mercury and other heavy metal pollutants introduced to the marine environment by the oil and gas activities. EPA is vitally interested in the ongoing studies to address this issue. There are also concerns about the eventual placement and operation of pipelines associated with the increase in oil and gas production which can be addressed in other forums as the technology proceeds.

-5-

Please keep EPA advised about the schedule for the lease sale. Should you have any questions on the above comments, please do not hesitate to contact me or Ted Bisterfeld, of my staff, at 404/562-9621.

Sincerely,

Heinz J. Mueller

Chief, Office of Environmental Assessment

cc: Andy Mager, NMFS St. Petersburg Sam Hamilton, USFWS Atlanta

United States Environmental Protection Agency

USEPA-1 There are currently 118 leased blocks and 138 unleased blocks within the proposed lease sale area (**Figure 1-2**), which is subject to change as leases expire, are relinquished, or terminated. The proposed lease sale area (**Figure 1-1**) is 70 miles (mi) from Louisiana, 98 mi from Mississippi, 93 mi from Alabama, and 100 mi from Florida.

The Minerals Management Service (MMS) believes that the level of uncertainty associated with forecasting "the number of blocks expected to be leased and their locations within the lease area" is so high that the results would be of little use and perhaps even misleading if used for product gathering and transport infrastructure studies. In addition, many other factors would affect the actual transport systems used in a proposed lease sale area, including company affiliations, amount of production, product type, and system capacity. Therefore, MMS does not forecast the actual gathering system and transport that would be used for a proposed action.

The MMS does estimate the number and length of installed pipeline related to a proposed action (**Table 4-2**): four new pipelines (2 natural gas and 2 crude oil) with a total length of 50-800 kilometers (km). The number and length of new pipelines were estimated using the amount of production, number of wells, and number of structures projected as a result of a proposed action. It is expected that the new pipelines would connect to existing or proposed pipelines near the proposed lease sale area (**Figure 4-3**).

- The MMS contacted the United States Environmental Protection Agency (USEPA), Region 4, for clarification regarding this comment. The USEPA stated that, although the No Action Alternative was not fully analyzed in this draft environmental impact statement (EIS), it was adequately addressed in the *Outer Continental Shelf Oil and Gas Leasing Program:* 2002-2007—Final Environmental Impact Statement; Volumes I-II (USDOI, MMS, 2002b) from which this document tiers; therefore, it is not necessary to include additional information on the No Action Alternative.
- The MMS event file of recorded accidents and oil spills shows that the rate of deepwater incidents is not significantly different than that for shallow water. The MMS is proactive in its research and policies with respect to accidents, oil spills, and new technology for both shallow and deepwater activities. The following describes just a few of the extensive deepwater analyses and policies that MMS performs.

The MMS officially receives definitive information on proposed new or unusual technology for development operations in an operator's conceptual deepwater operations plan per Notice to Lessees and Operators (NTL) 2000-N06. The MMS conducts both engineering and environmental evaluations of any new or unusual technology proposed by an operator. An approval from MMS is required prior to the operator fully developing the technology for implementation. Operators also denote new and unusual technologies in their Exploration Plans and Development Operations Coordination Documents or Development Plans that are submitted to MMS (NTL 2002-G08). For all alternate procedures or equipment, an operator must demonstrate to MMS's satisfaction that their proposal will "... provide a level of safety and environmental protection that equals or surpasses current MMS requirements" (MMS Operating Procedures, Section 30 Code of Federal Regulations (CFR) 250.141). Each environmental document prepared on an operator's plan will include an evaluation of the new and unusual technology and how it may interface with the environment. Approval of a plan may include mitigative measures to ensure environmental effects from the proposal are minimal. In addition, MMS participates in a variety of oil and gas industry forums to receive information on the

evolving technology for deepwater applications, such as DeepStar committees, Offshore Operators Committee groups, and Joint Industry Proposals.

This EIS incorporates previous environmental analyses including the *Gulf of Mexico Deepwater Operations and Activities Environmental Assessment* (EA) (USDOI, MMS, 2000) and the *Proposed Use of Floating Production, Storage, and Offloading Systems (FPSO) on the Gulf of Mexico Outer Continental Shelf, Western and Central Planning Areas, Final Environmental Impact Statement* (USDOI, MMS, 2001a) which apply specifically to deepwater.

The deepwater EA addresses the potential effects of oil and gas exploration, development, and production operations in the deepwater areas of the Gulf of Mexico (GOM) Outer Continental Shelf (OCS). The EA is a programmatic assessment of current and projected deepwater activities on the GOM OCS as of May 2000. The objectives of the document were:

- ensure that the deepwater activities occur in a technically safe and environmentally sound manner;
- determine which deepwater activities are substantially different from those on the continental shelf;
- determine which deepwater activities are substantially the same as those on the continental shelf;
- identify and evaluate the potential impacts of deepwater activities;
- develop mitigation measures for further evaluation;
- identify potential research or studies related to deepwater activities and environmental resources; and
- provide a summary document on deepwater technologies, activities, and impacts.

Published in February 2001, the FPSO EIS is an example of the special analysis MMS has done for new technology proposed for deepwater. Even though FPSO's are not projected for the proposed lease sale area, much of the technical information presented in the FPSO EIS applies to the deep waters of the area. Information collected in the Central Planning Area (CPA) is applicable, since it is adjacent to the proposed lease sale area.

USEPA-5 The referenced text in Chapter 4.1.1.4.1., Drilling Muds and Cuttings, has been changed accordingly.

USEPA-6 From July 2002 to February 2003, operators within the proposed lease sale area have submitted eight exploration plans (on blocks let in prior Lease Sales 116 and 181) proposing to test deeper geologic horizons. To estimate the drilling discharges from these deeper wells, MMS has developed another generic wellbore design to approximate the quantity of drilling discharges (cuttings and drilling fluid that may adhere to these cuttings) from these wells. This deep well design is similar to the wellbore schematic seen in Figure 4-2, except additional casing strings and drilling liners have been included in the wellbore. The casing points for the various strings have been adjusted to reflect possible geologic conditions that may be encountered with the deep wellbores. While the generic wellbore in Figure 4-2 had a total depth of approximately 2,789 meters (m) (9,150 feet (ft)), the deep well design extends the drilling depth to approximately 5,913 m (19,400 ft). For the deep well design, the "switch over" from a water-based fluid to a synthetic-based fluid is expected to occur at approximately the 914-m (3,000-ft) depth. Estimates of cuttings for the deep well design include "wash out" volumes for the wellbore that are similar to those used in the original generic wellbore (drilling intervals from 0 to 914 m (0-3,000 ft) at 20-40 percent and 5-15 percent from 914 m (3,000 ft) to total depth of the well measured from the seafloor).

Deep wells drilled during the development phase of a project may not include all the casings used in the exploration wells because operators gain geologic information from the exploratory wells and adjust their development drilling programs accordingly.

Given this new information, the referenced text in **Chapter 4.1.1.4.1.**, Drilling Muds and Cuttings, has been changed accordingly and a new table, **Table 4-8(b)**, added.

- USEPA-7 During a cruise scheduled as part of the *Deepwater Program: Joint Industry Project, Gulf of Mexico Comprehensive Synthetic Based Muds Monitoring Program* (GM-99-05), sediment samples were collected for total and methylmercury analysis. The full reference for the report is
 - Trefry, J.H., R. Trocine, M. McElvaine, and R. Rember. 2002. Final Report to the Synthetic-Based Muds (SBM) Research Group, Concentrations of Total Mercury and Methylmercury in Sediment Adjacent to Offshore Drilling Sites in the Gulf of Mexico. October 25.

The final report has been forwarded electronically to USEPA. It is available on MMS's website at http://www.gomr.mms.gov/homepg/regulate/environ/ongoing_studies/gm/MeHgFinal10_25.pdf or by calling the Public Information Office at 1-800-200-GULF. Text on the study and its results has been added to **Chapters 4.1.1.4.1.**, Drilling Muds and Cuttings, and **4.5.2.2.**, Marine Waters.

- **USEPA-8** The following citation was added to the bibliography:
 - U.S. Environmental Protection Agency. 1997. Mercury Study Report to Congress. Volume 1: Executive Summary. Office of Air Quality Planning and Standards and Office of Research and Development. EPA-452-/R-97-003.
- Within the United States, industrial sources of mercury pollution have been reduced or eliminated as our knowledge of the origins and cycling of mercury expands. While research efforts have identified the atmospheric deposition to be the major source of mercury in water, variable environmental conditions determine whether mercury will enter the aquatic food chain. Mercury in the GOM originates from inland and coastal point and nonpoint sources, historical contributions, and even some naturally-occurring sources. Unfortunately, all Gulf Coast States now have fish consumption advisories. This information is thoroughly presented in Chapter 4.5., Cumulative Environmental and Socioeconomic Impacts. Chapter 4.5.2.2., Marine Waters, discusses both OCS and non-OCS sources of mercury contamination while Chapter 4.5.10., Impacts on Fish Resources and Essential Fish Habitat, discusses bioaccumulation.
- The MMS assumes the comment references the discussion of the Gulf of Mexico Fisheries Management Council's (GMFMC) Generic Amendment recommendations for pipeline burial. The recommendation of a depth of 300 ft for pipeline burial in the text on page 3-67 (of the Draft EIS) was in error. The actual depth criteria in the GMFMC Essential Fish Habitat Generic Amendment is 200 ft as indicated on page 188 of that document (GMFMC, 1998), and is consistent with MMS's policy. The referenced text has been changed accordingly.
- USEPA-11 The referenced text in Chapter 3.2.8.2., Essential Fish Habitat, has been changed accordingly.
- USEPA-12 A statement has been added to Chapter 4.1.1.8.1., Pipelines, stating that the bundling of pipelines is not forecasted in the proposed lease sale area, which is all deepwater, due to

safety, maintenance and repair, and security issues. Text has also been added discussing the "merging of new [pipelines] with existing pipelines."

USEPA-13

The MMS has established a shallow hazards program to ensure that operators of Federal oil, gas, and sulphur leases and pipeline right-of-way (ROW) holders conduct operations with minimum risk to human life and the environment. The NTL 98-20 specifies the shallow hazards requirements necessary to meet this objective.

Adequate pipeline surveys are required by and reviewed by MMS in advance of proposed pipeline construction activities. Per NTL 98-20 and according to 30 CFR 250.1007(a)(5), all pipeline applications must include a shallow hazards analysis that addresses the entire length of the pipeline (regardless of the water depth or the distance from the proposed pipeline to pinnacle trend blocks, hard-bottom and high-relief marine resources, or other high-value marine habitats). To prepare an acceptable shallow hazards analysis for ROW pipelines, applicants must conduct a pipeline pre-installation survey that must include a line along the proposed pipeline route with an offset parallel line on either side spaced to coincide with the area that the pipeline-lay barge anchors will disturb. A shallow hazards report must be prepared that includes a summary of conclusions and recommendations supported by the survey data and analyses including a discussion of known or potential shallow hazards and areas to be avoided or that may require further investigations. For shallow hazard requirements, refer to NTL 98-20 at the MMS website http://www.gomr.mms.gov/homepg/regulate/regs/ntls/ntl98 20.html. Lease-term pipelines are covered by the shallow hazard survey of the lease.

There may be some confusion regarding the location of "pinnacles" and "live bottoms," and the requirement for "live-bottom surveys." "Live-bottom surveys" would only be required in the areas listed below. Although none of these areas are located in the proposed lease sale area, pipelines could be proposed in the vicinity of these or other high-value marine habitats.

1. Live Bottom (Pinnacle Trend) Stipulated Blocks – 70 lease blocks located in the CPA (refer to Figure II-2 of (USDOI, MMS, 2001e)

These blocks are protected by the Live Bottom (Pinnacle Trend) Stipulation that requires that prior to any drilling activities or the construction or placement of any structure for exploration or development on this lease, including but not limited to, anchoring, well drilling, and pipeline and platform placement, the lessee will submit to the Regional Director (RD) a live-bottom survey report containing a bathymetry map prepared utilizing remote-sensing techniques. The bathymetry map shall be prepared for the purpose of determining the presence or absence of live bottoms that could be impacted by the proposed activity. This map shall encompass such an area of the seafloor where surface disturbing activities, including anchoring, may occur. Photodocumentation of identified pinnacles is not required.

2. Live Bottom (Low Relief) Stipulation Blocks – all Eastern Planning Area (EPA) blocks in water depths less than 100 m (refer to Figure II-2 of (USDOI, MMS, 2001e)

These blocks are protected by the Live Bottom (Low Relief) Stipulation that requires that prior to any drilling activities or the construction or placement of any structure for exploration or development on this lease, including but not limited to, well drilling and pipeline and platform placement, the lessee will submit to the RD a live bottom survey report containing a bathymetry map prepared utilizing remote sensing techniques *and an interpretation of live bottom areas prepared from a photodocumentation survey*. The live bottom survey report, including the attendant surveys, will encompass an area within a minimum 1,000 m distance of a proposed activity site. For photodocumentation

requirements, refer to NTL 99-G16 (Live-Bottom Surveys and Reports) at the MMS website http://www.gomr.mms.gov/homepg/regulate/regs/ntls/ntl99-g16.html.

3. Eastern Gulf Pinnacle Trend Stipulated Blocks – 4 blocks located in the EPA that represent an extension of the pinnacle trend in the EPA in water depths greater than 100 m (refer to Figure II-2 of (USDOI, MMS, 2001e)

These blocks are protected by the Eastern Gulf Pinnacle Trend Stipulation that requires the same protective measures as the Live Bottom (Pinnacle Trend) Stipulation noted in Item 1 above.

It should also be noted that any bottom-disturbing activities in water depths greater than 400 m must be in compliance with NTL 200-G20 (Deepwater Chemosynthetic Communities). For requirements regarding protection of chemosynthetic communities, refer to the MMS website http://www.gomr.mms.gov/homepg/regulate/regs/ntls/ntl00-g20.html.

- USEPA-14 Discussions were held between MMS and USEPA, Region 4, to further clarify this comment. The USEPA has requested that they be notified of any applications for ROW pipelines from the proposed lease sale area. The MMS has agreed to notify USEPA, via electronic mail, of any applications for ROW pipelines from the proposed lease sale area. The MMS has further agreed to notify USEPA, via electronic mail, of exploration and development plans in the area.
- **USEPA-15** All lines, whether producer operated or nonproducer operated, are subject to the same application requirements and reviews described in response USEPA-11.
- USEPA-16 A probabilistic event such as an oil spill cannot be predicted with certainty. Only an estimate of its likelihood (its probability) can be quantified. Oil spills related to a proposed action are estimated over the life of a proposed action (37 years); cumulative OCS and non-OCS spills are estimated for a 40-year period. The probability of an oil-spill occurrence is based on spill rates derived from historic data (Chapter 4.3.1.1.1., Past Spill Incidents) and on estimated volumes of oil produced and transported. In addition, MMS is less certain of spill data on sources it does not regulate (non-OCS).

The probability of oil spills occurring assumes that spills occur independently of each other as a Poisson process. A Poisson distribution is commonly used for modeling systems in which the probability of an event occurring is very low and random. **Figures 4-7, 4-8, and 4-9** show this distribution in the estimated numbers of spills for the OCS Program.

Review of pipeline applications includes the evaluation of protective safety devices such as pressure sensors and automatic valves, the physical arrangement of those devices proposed to be installed by the applicant for the purposes of protecting the pipeline from possible overpressure conditions, and for detecting and initiating a response to abnormally low-pressure conditions. Once a pipeline is installed, operators conduct monthly overflights to inspect pipeline routes for leakage. Chapter 1.5., Pipelines, and Pollution Prevention, discusses these topics in depth.

In addition, MMS works with the offshore oil and gas industry and inter-disciplinary researchers to advance pipeline production and safety. In February 2003, MMS and the Department of Transportation, Research and Special Projects Administration hosted the International Offshore Pipeline Workshop. The objective of the workshop was to bring together worldwide experience in operating and regulating offshore oil and gas activities in order to identify/disseminate pipeline issues and knowledge for continued safe and pollution free operations. The inspection/leak detection working group focused on the

technical reliability of existing technology and the types of leak detection systems available.

USEPA-18

Spill rates used in this EIS are expressed as number of spills per billion barrels of oil produced or transported. The volume of oil produced or transported was chosen as the exposure variable because historic volumes of oil produced and transported are well documented; using these volumes makes the calculation of the estimated oil-spill occurrence rate simple - the ratio of the number of historic spills to the volume of oil produced or transported; and future volumes of oil production and transportation are estimated. In addition, MMS estimates other exposure variables, such as the number of platforms, as a function of the volume of oil estimated to be produced or transported.

Deepwater oil production now accounts for more than half of the oil production of the GOM. This has been a steady increase from only 6 percent in 1985. Despite the increase of deepwater production, no spills greater than or equal to (\geq) 1,000 barrels (bbl) from OCS facility operations have occurred since 1980 (**Table 4-27**). The OCS pipeline spill occurrence rates for spills \geq 1,000 bbl has remained essentially unchanged. **Table 4-28** shows that OCS pipeline spills (\geq) 1,000 bbl) have occurred in water depths of 435 ft and shallower. Nearly all these spills were caused by anchor or trawl drags, which would not occur in the deeper water of the proposed lease sale area.

USEPA-19

It is not clear to which section of **Chapter 2** these comments on chemosynthetic communities are referring. The section on page 2-12 (of the Draft EIS), Impacts on Sensitive Offshore Benthic Resources, refers directly to chemosynthetic communities. This section *does not* say that chemosynthetic communities "have been missed in past survey work." One sentence does state that "If the presence of a high-density community were missed..." impacts would result. To date, there are no known impacts from oil and gas activities on a high-density chemosynthetic community. There is more extensive discussion of the technology used for detecting communities and its accuracy in **Chapter 3.2.2.2.1.**, Chemosynthetic Communities. The information in **Chapter 2** is only introductory and specifically oriented to a summary of impacts.

USEPA-20

The setback distance and the NTL that specifies the distances both appear in **Chapter 2**. This information also appears in greater detail in **Chapter 4** under the proposed action analysis for chemosynthetic communities, **Chapter 4.2.1.4.2.1.**, page 4-70 of the Draft EIS.

USEPA-21

The section in **Chapter 2** on impacts to fisheries states that "the proposed action is expected to result in *less than* a 1 percent decrease in fish resources and or standing stocks....," not exactly 1 percent. An estimate such as this comes from a generalized evaluation of impacting sources, severity, duration, and historical precedent. Agreed, the accuracy of an exact prediction would be questionable, but the figure of "less than a 1 percent decrease" represents a very low level of impact. **Chapter 2** is a summary of impacts; a more detailed description of the impacts to resources appears in **Chapters 4.2.**, **4.4.**, and **4.5.**

USEPA-22

The comment was made about the discussion of fishery mitigation being in **Chapter 3**, Description of the Affected Environment, as opposed to **Chapter 4**, Environmental and Socioeconomic Consequences. **Chapter 3** does not discuss any new fishery mitigations; there is a description of Essential Fish Habitat (EFH) in **Chapter 3.2.8.2.** Moving all of the material related to fisheries mitigation into **Chapter 4** would be problematic. Virtually all of this discussion is related to EFH. The EFH program itself is essentially a form of mitigation. Similar to the mention of the Endangered Species Act, it is important to introduce these programs with the initial resource description in **Chapter 3**. This includes an introduction of what EFH is and MMS's existing agreements and associations

with the National Oceanic and Atmospheric Administration Fisheries. We believe this information is more useful by its close association with the initial fisheries descriptions.

USEPA-23 The referenced text in Chapter 4.1.1.4., Operational Waste Discharged Offshore, was changed accordingly.



Department of Environmental Protection

Jeb Bush Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

David B. Struhs Secretary

January 24, 2003

Mr. J. Hammond Eve Regional Supervisor (MS 5410) Minerals Management Service Gulf of Mexico OCS Region Office of Leasing and Environment 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394

Dear Mr. Eve:

The State of Florida has completed a review of the Gulf of Mexico OCS Oil and Gas Lease Sales 189 and 197, Eastern Planning Area, Draft Environmental Impact Statement (DEIS), pursuant to NEPA (42 U.S.C. 4331). The DEIS addresses a range of activity anticipated and the resulting environmental effects of each of the proposed sales included in the Outer Continental Shelf Oil and Gas Leasing Program for 2002-2007 within the revised Lease Sale 181 area. Lease Sale 189 is scheduled to occur in 2003 and Lease Sale 197 in 2005. At the completion of this Environmental Impact Statement (EIS) process, a decision will be made only on Lease Sale 189. An additional National Environmental Policy Act (NEPA) review will be conducted prior to Lease Sale 197 to address any new information relevant to the proposed sale through either an Environmental Assessment (EA) or, if warranted, a supplemental EIS.

Two alternatives are analyzed in the DEIS. Under Alternative A, the proposed action, the Minerals Management Service (MMS) would offer all unleased blocks within the proposed sale area for oil and gas operations. Alternative B, the no action alternative, is the cancellation of the proposed lease sale, which would result in precluding or postponing potential environmental impacts resulting from the sale.

Florida remains concerned about the effects that OCS oil and gas activities conducted in the deepwater habitat offshore of Alabama may have on marine and coastal environments and the sensitive biological resources and critical habitats associated with them. A significant amount of activity over several decades can be expected to result from blocks previously leased in this area and those leased in the proposed sales. The state recommends that MMS carefully assess the impacts and drilling results from activities on blocks previously leased in this area before making final decisions.

FLDEP-1

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Mr. J. Hammond Eve January 24, 2003 Page Two

Should MMS decide to proceed with Lease Sale 189, appropriate stipulations should be adopted that provide maximum protection to Florida's marine and coastal resources. These should include, at a minimum, the marine protected species stipulation previously adopted for Lease Sales 181 and 182 and Notice to Lessees and Operators (NTL) No. 2001-G04, Remotely Operated Vehicle Surveys in Deepwater. The state recommends that the MMS extend the coverage of NTL 2001-G04 to include the proposed lease sale area. Requiring these surveys will help to determine the impacts of drilling activities on deepwater communities. Additional comments regarding the DEIS are enclosed.

Thank you for the opportunity to provide comments on the DEIS. The state will continue to assess OCS activities and environmental analyses to ensure the protection of marine and coastal resources, including review of the FEIS and accompanying Coastal Zone Management Act consistency determination and assessment. Should you have questions regarding the state's comments, please call me at (850) 245-2029.

Sincerely,

Lisa Polah Edgar
Lisa Polak Edgar
Deputy Secretary for

Planning and Management

LPE/dt

Enclosure

cc: George Henderson, FMRI

State of Florida Comments on the Draft Environmental Impact Statement For the Proposed Lease Sales 189 and 197

Volume I: Chapters 1-8 and Appendices

LDEP-2

Page viii. Mitigating Measures. The text states that consultations with other agencies may determine specific protective measures, such as the Marine Protected Species Stipulation included in previous lease sales. Florida recommends that the stipulations adopted for Lease Sale 181 be considered as a minimum requirement for proposed Eastern Gulf Lease Sales 189 and 197.

LDEP-3

Page x. It is noted that the text states "Oil spills pose the greatest potential direct and indirect impacts to coastal birds. If physical oiling of individuals or local groups of birds occurs, some degree of both acute and chronic physiological stress associated with direct and secondary uptake of oil would be expected. Low levels of oil could stress birds by interfering with food detection, feeding impulses, predator avoidance, territory definition, homing of migratory species, susceptibility to physiological disorders, disease resistance, growth rates, reproduction, and respiration." This discussion emphasizes the need to prevent oil spills and adequately plan for responding should a spill occur.

LDEP-4

Page xi. The text states that the impact from oil spills on recreational beaches is expected to be short-term and localized, and that a large volume of oil contacting a recreational beach could close the area to recreational use for up to 30 days. Please discuss the potential for a long-term effect on recreational use which may result from the public's perception of contamination.

LDEP-6 FLDEP-5

Page xvii. Table 1 provides a scenario of projected or estimated exploration and development activities and impact producing factors for the proposed sales. In the table the length of pipeline installed is listed as not available. Since a range of estimated pipelines installed is provided for the entire Eastern Planning Area, estimates for each sale should also be provided.

Page xxxix - xlii. List of Tables. Page numbers for tables listed are often incorrect.

TDEP-7

Page 1-7. The discussion states that MMS is reinstating formal Endangered Species Act Section 7 consultation with the NOAA fisheries that will result in a new Biological Opinion (BO) regarding explosive removals of OCS structures.

Please include a discussion of any recommendation resulting from this consultation in the FEIS if completed.

LDEP-8

Page 2-5. The text states that marine protected species stipulations were included in Eastern GOM Lease Sale 181 and Central GOM Lease Sale 182, but that the specific protective measures to be included will not be determined until NOAA Fisheries has completed their Biological Opinion. Stipulations that provide at least the same level of protection to marine protected species should be adopted as mitigation measures in the Eastern Planning Area.

LDEP-9

Page 2-8. The discussion of Non-Indigenous/Invasive Species states that "there is no conclusive data that shows OCS development and related activities are the responsible vector for the occurrence and establishment" of these species. The FEIS should discuss any data concerning the role that OCS development and related activities may play in the establishment and spread of non-indigenous/ invasive species in the area. The discussion of any results available from the two MMS sponsored studies investigating interactions between migrating birds and OCS structures, and the relationship of the Australian spotted and the pink jellyfish to OCS platforms should be included in the FEIS.

LDEP-10

Page 2-10. The discussion notes that the accidental release of SBF is expected to have temporary, localized impacts on water quality. These impacts to water quality could also negatively impact biological resources.

LDEP-11

Page 2-11. The text states that if an oil slick settles into a protective embayment where seagrass beds are found, under "the more probable circumstances", the diversity or population of epifauna and benthic fauna found in seagreass beds could be reduced for up to twoyears. Is this statement referring to a situation where oil actually contacts the seagrass community or simply reduces light or oxygen? Please clarify this discussion in the FEIS. In addition, the FEIS should indelude a discussion of which fauna would most likely be impacted and to the ability of communities to return to pre-impact conditions.

LDEP-12

Page 2-13. The FEIS should discuss the effects of the discharge of drill cuttings with synthetic based drilling fluids adhering to them on benthic populations and their capacity to return to pre-impact conditions.

LDEP-13

Page 2-13. The discussion under "Nonchemosynthetic" communities notes that deepwater coral habitats and other potential hard-bottom communities not associated with chemosynthetic communities appear to be very rare, however, they would be particularly sensitive to impacts from OCS activities. The discussion then indicates that it is thought that these deepwater communities would be protected as an indirect result of the avoidance of potential chemosynthetic communities as required by NTL 2000-G20. Please explain how the NTL for protecting chemosynthetic communities can be used to protect

nonchemosynthetic communities not associated with chemosynthetic communities.

LDEP-1

Page 3-27. The discussion of nonchemosynthetic benthic communities supports the need for identifying and better understanding the benthic communities in the sale 181 area which could be affected by OCS activities.

LDEP-15

Page 4-5. The text here and in numerous other places throughout the DEIS reference is made to Figure 3-1 which is supposed to depict the location of offshore subareas. Figure 3-1 is the "Status of Ozone Attainment in the Coastal Counties and Parishes of the Central Gulf of Mexico." The FEIS should include a figure of the subareas indicated in Table 1 that appear to be related to water depth.

FLDEP-16

Page 4-8. The discussion under "Exploration and Delineation Drilling Plans" should be corrected to read NTL 2002-G08 not NTL 2000-G08.

LDEP-17

Page 4-184. The text states that Table 4-63 highlights and summarizes technical evidence for using various mitigation processes associated with pipeline construction, dredging, etc. Since there is no Table 4-63, should this be Table 4-52?

Volume II: Figures and Tables

LDEP-18

Fig. 3-3. In this figure showing estuarine systems of the Gulf of Mexico, number 15 is incorrectly labeled as Florida Bay and should be Charlotte Harbor. Florida Bay is located just north of the Florida Keys and should be correctly labeled on the figure. In addition, Apalachicola Bay should be added to the figure. The FEIS should include these corrections.

FLDEP-19

Fig. 4-12. This graph shows the anticipated percent volume of an oil slick in the OCS Eastern Planning Area gradually declining over 30 days, via natural dispersion, evaporation, chemical dispersion, and mechanical removal. The graph also indicates that at the end of the 30 days approximately 13% of the slick would still be present and the rate of decrease in volume remaining would be very low. Please discuss the characteristics and natural dispersion of the spill beyond 30 days.

LDEP-20

Figure 4-19. This figure shows that offshore waters and beaches along the Florida west coast have a <0.5 % chance of being contacted by a spill originating in the lease sale area within both 10 and 30 days. Yet, figures 4-26, 27, 29, 30, 32, and 33 (as well as others) all list higher probabilities of contact by a spill for individual species which occupy the same areas identified in Figure 4-19. This should be corrected or an explanation of the disparities discussed in the FEIS.



State of Florida, Department of Environmental Protection

- **FLDEP-1 Table 4-4** shows the activity projected to occur from 2003 to 2042 from past, present, and future lease sales in the Eastern Planning Area (EPA). Within the proposed lease sale area, six wells (one of which was sidetracked to a new bottom hole location) have been drilled; **Figure 1-3** shows the location of approved and pending plans that have been submitted. Information collected from past activity and planned activity within and near the proposed lease sale area was included in the baseline data for this environmental impact statement (EIS). An additional National Environmental Policy Act review will be conducted in the year prior to proposed Lease Sale 197 to address any relevant new information. Minerals Management Service (MMS) scientists will continue to perform site-specific reviews on each exploration and development plan submitted, taking into account other existing and planned activity. In addition, MMS has and will fund studies that are utilized in EIS analyses and review of individual plans. See MMS's website (http://www.gomr.mms.gov/homepg/offshore/egom/cmp_stud.html) for a list of completed studies in the Eastern Gulf of Mexico (GOM), offshore Florida.
- FLDEP-2 The Lease Sale 181 Marine Protected Species Stipulations are now embodied in Notice to Lessees and Operators (NTL) 2003-G07 Vessel Strike Avoidance and Injured/Dead Protected Species Reporting and NTL 2003-G06 Marine Trash and Debris Awareness and Elimination. The requirements of these NTL's apply to all existing and future oil and gas operations on the GOM Outer Continental Shelf (OCS).
- **FLDEP-3** The comment refers to the **Executive Summary**. A detailed discussion of oil-spill response appears on pages 4-115 through 4-120 of the Draft EIS (**Chapter 4.3.1.1.4.**, Spill Prevention Initiatives).
- FLDEP-4 The comment refers to the Executive Summary. The discussion of oil spills on recreational beaches appears on pages 4-164 and 4-165 of the Draft EIS (Chapter 4.4.12., Impacts on Recreational Resources). Freeman and Sorenson, as discussed in the section, have studied the effects of actual oil spills on recreational beaches. Both have indicated that, while short-term effects would result, there would be no long-term effects on visitations or tourism.
- **FLDEP-5 Table 1** presents offshore scenario information related to a proposed action in the EPA which is representative of either proposed Lease Sale 189 or Lease Sale 197. Therefore, the "Length of Installed Pipelines" numbers represent the kilometers of pipeline we expect to result from each proposed lease sale.
- **FLDEP-6** The referenced text has been changed accordingly.
- A programmatic environmental assessment (EA) is currently being prepared for **FLDEP-7** explosive and nonexplosive decommissioning activities on the GOM OCS. completed (Winter 2003/2004), information from the programmatic EA will be used to initiate a new Section 7, Endangered Species Act (ESA) Consultation for explosive removals. Even though no explosive removals are projected for the proposed lease sale area, any explosive removal operations would be subject to the terms and conditions of (1988)Biological Opinion and Incidental Take existing Statement (http://www.gomr.mms.gov/homepg/regulate/environ/generic-consultation.pdf) until the reinitiated Consultation is completed.
- **FLDEP-8** See response FLDEP-2.

FLDEP-9 The MMS is currently sponsoring two studies investigating (1) the interactions between migrating birds and oil and gas structures off coastal Louisiana and (2) the relationship, if any, of the Australian spotted and the pink jellyfish to OCS platforms. The data from both studies are too preliminary to use at this time. Information about each study follows.

Interactions Between Migrating Birds and Offshore Oil and Gas Structures Off the Louisiana Coast. The objectives of this study are to

- 1. identify, quantify, and evaluate the habitats and conditions of migratory birds found on a representative sample of OCS offshore structures in the Central and Western GOM;
- 2. determine what physiological conditions limit avian migration;
- 3. determine seasonal arrival, departure, or demise of Gulf transmigrants at offshore OCS structures and at coastal sites;
- 4. evaluate identified species to determine whether they are endangered, threatened, or in decline; and
- 5. evaluate the interaction of neotropical migrants and their migrations with offshore OCS structures, identifying to what extent OCS structures may have a positive, negative, or neutral effect.

A Survey of the Relationship of the Australian Spotted Jellyfish, Phyllorhiza punctata, and OCS Platforms. The objectives of this study are to

- 1. determine the areal extent of the sessile polyp stage of the jellyfish; and
- 2. determine the proportions of Australian spotted jellyfish recruits with respect to other jellyfish species and other attached organisms on offshore platforms, other hard substrates and the bottom of the Gulf.
- As discussed in **Chapter 4.1.1.4.1.**, Drilling Muds and Cuttings, the discharge of synthetic-based fluids (SBF) is prohibited in the United States Environmental Protection Agency, Region 4. **Chapter 4.3.4.**, Chemical and Drilling Fluid Spills, describes an accidental release of synthetic-based drilling fluid through a riser disconnect. The primary effects would be smothering of the benthic community, alteration of sediment grain size, and addition of organic matter which can result in localized anoxia while the SBF degrade. Impacts of accidental events are analyzed by individual biological resource in Chapter 4.4.
- **FLDEP-11** The referenced text in **Chapter 2.3.1.2.**, Summary of Impacts, has been changed accordingly as has the text in **Chapter 4.4.3.3.**, Seagrass Communities.
- This comment refers to **Chapter 2**, which is only introductory and specifically oriented to a summary of impacts. As noted in the topic heading, details of impact analysis appear in **Chapters 4.2.1.4.2.2.** and **4.4.4.2.2.** The impacts of muds and cuttings discharges on benthic populations are discussed in **Chapter 4.2.1.4.2.2.**, Nonchemosynthetic Communities, on pages 4-72 and 4-73 of the Draft EIS.
- This comment refers to **Chapter 2**, which is only introductory and specifically oriented to a summary of impacts. The NTL is discussed in detail in **Chapter 4.2.1.4.2.2.**, Nonchemosynthetic Communities, page 4-73 of the Draft EIS. In general, areas suspected of being hard-bottom (potential substrate for deepwater corals), as depicted on three-dimensional seismic surface amplitude anomaly maps, are avoided as a potential geological hazard. Of particular note is the fact that no hard-bottom areas have been identified in this region, which ranges from over 5,000 feet (ft) to over 9,800 ft deep. Furthermore, as an insurance measure, MMS will require remotely operated vehicle surveys at many of the first exploration sites in the proposed lease sale area.

- FLDEP-14 The MMS disagrees with the comment that the discussion of nonchemosynthetic communities on page 3-27 (of the Draft EIS) somehow "supports the need for identifying and better understanding the benthic communities in the Sale 181 area [the proposed lease sale area] which could be affected by OCS activities." While there is always a desire to better understand any aspect of deep-sea biology, sediment samples have been collected from within and nearby the proposed lease sale area that included biological analysis (Chapter 3.2.2.2.2., Nonchemosynthetic Benthic Communities). No hard-bottom areas have been identified in the proposed lease sale area. Soft-bottom benthic communities at the water depths of the proposed lease sale area are now relatively well known.
- FLDEP-15 The referenced text in Chapter 4.1.1.1.1., Proposed Action, has been changed to reference Figure 3-10, Gulf of Mexico Offshore and Coastal Subareas. A reference to Figure 3-10 was added to Table 1.
- **FLDEP-16** The referenced text in **Chapter 4.1.1.2.2.**, Exploration and Delineation Drilling Plans, has been changed accordingly.
- FLDEP-17 The referenced text in Chapter 4.5.3.2., Wetlands, has been changed accordingly.
- **FLDEP-18 Figure 3-3** has been changed accordingly.
- **FLDEP-19 Figure 4-12** was selected to represent the worst case from 16 hypothetical scenarios. The hypothetical 13 percent of spilled oil that remains after 30 days of winter conditions (600 of 4,600 barrels (bbl)) would continue to weather. **Figure 4-17** shows that after 30 days, biodegradation, photo-oxidation, and sedimentation become important weathering processes while evaporation and dispersion have diminished impact.
- FLDEP-20 Figure 4-19 illustrates the probability of an offshore spill greater than or equal to 1,000 bbl occurring and contacting four Florida recreational beach areas (Panhandle, Big Bend, Southwest, and Ten Thousand Islands) as a result of a proposed action. Figures 4-26, 4-27, 4-29, 4-30, 4-32, and 4-33 illustrate the probability of a spill occurring and contacting various bird habitats. The probability of a spill occurring and contacting a habitat is greater than any of the Florida recreational beach areas because the habitats cover a longer portion of shoreline and the habitats occupy lengths of shoreline with higher probabilities. Figure 4-18, which illustrates probability by county and parish, shows there are two areas with a greater than 0.5 percent probability of a spill occurring and contacting land: Lafourche and Plaquemines Parishes in Louisiana.
- **FLDEP-21 Table 4-51** has been changed accordingly.



M.J. "MIKE" FOSTER, JR. GOVERNOR

JACK C. CALDWELL SECRETARY

Mexico OCS

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DEPARTMENT OF NATURAL RESOURCES

January 24, 2003

Chris C. Oynes
Regional Director
U. S. Dept. of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Blvd.
New Orleans, Louisiana 70123-2394

RE: C20020495, Consistency Determination Minerals Management Service

Direct Federal Action

Draft Environmental Impact Statement (EIS) for proposed Outer Continental Shelf Lease Sales 189 & 197, Eastern Gulf of Mexico Planning Area

Dear Mr. Oynes:

The above referenced Lease Sales have been reviewed for consistency with the approved Louisiana Coastal Resources Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. It has been determined that Eastern Gulf of Mexico Lease Sales 189 and 197 are consistent to the maximum extent practicable with the Louisiana Coastal Resources Program, although certain environmental issues of concern to the State of Louisiana are worthy of comment as follows.

The proposed location for Lease Sales 189 and 197 are at the extreme western edge of the Eastern Gulf of Mexico Planning Area, in close proximity to the eastern shoreline of Louisiana and its extensive coastal wetlands. For this reason, and because of the extensive oil and gas infrastructure and support bases located in the central and eastern regions of coastal Louisiana, wetland and socioeconomic impacts resulting from these lease sales will be as great or greater on the Coastal Zone of Louisiana as on adjoining states. Loss of wetlands in Louisiana will result from such diverse OCS generated activities as pipeline installation and subsequent pipeline canal widening, waterborne traffic along navigation canals, oil spills, water pollution degradation of marshes, canals and valuable estuarine water bodies; onshore infrastructure development at the expense of wetlands; and, environmental contamination associated with hazardous wastes produced in the Eastern Gulf of Mexico Planning Area and stored in or disposed of in the Louisiana Coastal Zone.

According to the draft EIS, Lease Sales 189 and 197 are each expected to result in the production of 0.065-0.085 billion barrels of oil, 0.265-0.340 trillion cubic feet of gas, 11-13

ADNR-1

Mr. Oynes Jan. 24, 2003 Page 2

exploration and delineation wells, 1-27 development wells and two production structures. Since this area is located only 70 miles from Louisiana's shoreline, wetland losses are expected from navigation canal widening from service and transport vessels and from pipeline impacts in wetlands. Further wetland losses could occur in the Louisiana Coastal Zone from OCS related oil spills. The proposed action is estimated to accidentally spill 13-162 bbs of oil into coastal waters. Besides these spills, there is a 3-4% chance of an offshore oil spill in excess of 1,000 bbl, with a 1% risk of reaching coastal waters of coastal Louisiana.

Notably, wetland losses such as those cited above have occurred continuously over the 40 year history of MMS lease sales in the Central Gulf, and are expected to continue in the future as large deepwater fields and subsalt reserves are developed here and in the Eastern Gulf. It should also be pointed out that while wetland losses may sometimes be attributed to individual petroleum activities, it is usually not possible to identify specifically which company is responsible for each wetland loss because many of these losses occur along waterways traveled in common by all users and from a multitude of indirect and secondary effects of petroleum development activities. Hence, DNR views the Federal agency responsible for promoting these activities as responsible for the indirect and cumulative impacts arising from them.

In view of the above cited direct, indirect and cumulative wetland impacts expected in Louisiana from Lease Sales 189 and 197, this Office recommends that MMS consider means to compensate/mitigate Louisiana for these and other adverse impacts on Louisiana's infrastructure and socioeconomics as cited below. Louisiana has a no net wetlands loss policy, in which the entity responsible for the wetland loss must mitigate or otherwise provide adequate compensation for the loss. It is also noteworthy that Executive Order 1190 establishes that each Federal agency shall provide leadership and take action to minimize the destruction, loss or degradation of wetland, and to preserve and enhance the values of wetland. To this end, we recommend that MMS take a leadership role in finding methods to adequately compensate Louisiana, which has borne the brunt of OCS onshore activities.

The enactment by Congress of the Outer Continental Shelf Deep Water Royalty Relief Act has resulted in a rapid increase in deepwater Gulf development in the Gulf of Mexico and in and around shore bases in the Louisiana Coastal Zone. This legislation and recent technological advances in the petroleum industry have resulted in an oil boom that has severely stressed Louisiana's onshore infrastructure and coastal communities. All the workers, equipment, supplies, transportation facilities, etc., which have accompanied the explosive growth in deepwater development depend on land based facilities and community infrastructure, located primarily in Louisiana. Highways, housing, water, acreage for new business locations and expansions of existing businesses, waste disposal facilities, and other infrastructure facilities are needed in localized areas such as southern Lafourche Parish, where the bulk of land based deepwater activity is occurring. Compounding the magnitude of impacts from the new development is the fact that the existing land based infrastructure is already heavily overburdened and in need of expansion and improvement which requires extensive financial infusions from state and local government. We submit that some of the financial responsibility for upgrading the vast and complex infrastructure for OCS development and impact should come from the

Mr. Oynes Jan. 24, 2003 Page 3

proceeds of United States government sales of these potentially highly productive leases.

Impacts to community infrastructure from OCS activity are to be expected, including impacts to local provision of education, police, fire, sewage, solid waste disposal, water, recreation facilities, transportation systems, health care, utility service and housing. CMD is encouraged by action on the part of MMS to study deepwater activity impacts to the infrastructure of Port Fourchon and Lafourche Parish and hopes to see similar studies coastwide. We are pleased and encouraged that the State of Louisiana was the recipient of a grant from the Historic Preservation Fund of \$818,504.00 for Fiscal Year 2001 as reported by MMS in the Consistency Determination for Lease Sale 185. We encourage MMS to continue these financial assistance efforts and grants and also, to help the concerned states to effect legislative changes so that the more heavily impacted states receive a more appropriate proportion of these funds. MMS should also initiate studies and provide assistance to impacted communities to help plan and implement procedures to diversify their local economies and to develop efficient growth measures that minimize disruption from the social and environmental impacts of OCS activity.

We strongly support OCS legislation recently passed by Congress for one-time revenue sharing by states and local governments affected by OCS development activities. We do recognize, however, that this one-time appropriation, while evincing that Congress acknowledges OCS's myriad impacts, does not provide the steady stream of funding needed to fully address a continuing problem. This legislation has promise for offsetting some of the infrastructure costs and wetland and socioeconomic impacts suffered by the State of Louisiana and its coastal communities. To this end we fully support OCS legislation which provides for such a revenue stream.

Finally, it must be noted that Louisiana has enjoyed many benefits from OCS exploration and development. The Louisiana Department of Natural Resources appreciates the opportunity to comment on Lease Sales 189 and 197. We are grateful for the opportunity to voice our concerns regarding the preservation of the natural resources of the Coastal Zone. It is hoped that our concerns are addressed in future Lease Sales and 5-year Leasing Programs, and our suggestions incorporated into the leasing program.

Sincerely,

Terry W. Howey Administrator, CMD

TWH/JH/bgm

cc: Jack Caldwell, Secretary

State of Louisiana, Department of Natural Resources

LADNR-1

The Minerals Management Service (MMS) agrees that because of the extensive oil and gas infrastructure and support bases located in the central and eastern regions of coastal Louisiana, the wetlands and socioeconomics of the area will be impacted to some extent by the proposed actions. As stated in **Chapters 4.2.1.3.2.** and 4.5.3.2. of the draft environmental impact statement (EIS), the proposed action is expected to contribute to wetland losses. Impacts to wetlands from some Outer Continental Shelf (OCS) related activities are expected to be greatest in Louisiana because of the nature of the soils there. The proposed action is also expected to impact (both positively and negatively) the socioeconomics of south Louisiana. This topic is discussed in **Chapters 4.2.1.15.** and 4.5.15. of the Draft EIS.

LADNR-2

Comments noted. Regarding your concerns on compensation/impact assistance, the Department of the Interior has supported the concept of a greater sharing of revenues with the States and communities most heavily affected by OCS oil and gas activities as well as the principle of using impact assistance as a means of protecting coastal and marine resources, mitigating the environmental impacts of OCS activities, and strengthening the Federal-State partnership. As your letter notes, the previous Congress passed legislation (Public Law 106-553) that, among other things, added a new Section 31 to the OCS Lands Act, establishing a coastal impact assistance program. This program is administered by the Department of Commerce; in Fiscal Year (FY) 2001 Congress appropriated approximately \$150 million to be given to affected coastal States under this program. Funding is handled through a formula that takes into account proximity to OCS production. The provisions of section 31 allow a State to use a portion of the monies it receives (up to 23%) to mitigate the environmental impacts of OCS activities through funding onshore infrastructure projects and other public service needs. Under the funding formula, Louisiana is eligible to receive a significant amount of monies that would address the types of concerns raised in your letter, should funding be available. It is our understanding that there has been no further funding of the program in FY 2002 or 2003. Furthermore, the President's FY 2004 budget does not request funding for the program.

The MMS has and will continue to work closely with the State of Louisiana. Over the FY 1999-2003 period, MMS has funded over \$8 million (an average of \$1.7 million per year) in studies relevant to Louisiana through the Louisiana State University Coastal Marine Institute (CMI) cooperative agreement. This program was established in 1992 to address local and regional OCS-related environmental and resource issues; to strengthen the MMS-State of Louisiana partnership in addressing OCS oil and gas and marine information needs; to improve information flow to the affected States and the public; and to improve the credibility and use of environmental research conducted for the agency. The MMS is expected to fund \$1.6 million through the CMI in FY 2004. In addition, MMS has funded several studies either directly requested by the State (i.e., Coastal Wetland Impacts - OCS Canal Widening Rates and Effectiveness of OCS Pipeline Canal Mitigation and Environmental Sensitivity Index (EIS) Shoreline Classification Using New Remote Sensing Data and Techniques) or by regional representatives (i.e., Deepwater Program: Supply Logistics of OCS Oil and Gas Development in the Gulf of Mexico – Evaluation of Technological and Economic Parameters of Ports as Supply and Manufacturing Bases) that will support initiatives addressing State OCS-related effects and local planning for OCS-related activities. Furthermore, MMS is collaborating with the State and several federal and local agencies on coastal restoration projects by providing OCS sand. As a part of this effort, MMS has sponsored two studies. Wave-Bottom Interaction and Bottom Boundary Layer Dynamics in Evaluating Sand Mining at Sabine Bank for Coastal Restoration, Southwest Louisiana and Coastal Climate and Bottom Boundary Layer Dynamics with Implications for Offshore Sand Mining and Barrier Island Replenishment in South-Central Louisiana, that will provide valuable information in accomplishing these projects. Lastly, MMS has worked closely with the State on Coastal Zone Management (CZM) issues to ensure conformity with the State's CZM program policies and local land-use plans and will continue to do so in the future. The MMS values its relationship with the State and will continue to cooperate with it on OCS-related issues.



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Minerals Management Service Gulf of Mexico OCS Region Department of the Interior Mr. Chris Oynes, Regional Director (MS 5412) 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394 (via environment@mms.gov)

January 23, 2003

Dear Mr. Oynes:

WDCS comments on draft Environmental Impact Statement (EIS) on proposed oil and gas lease sales (numbers 189 and 197) in the Eastern Planning Area (EPA) Outer Continental Shelf (OCS) of the Gulf of Mexico

WDCS, the Whale and Dolphin Conservation Society, is a conservation and welfare organization representing over 60,000 members and supporters worldwide. Since its establishment in 1987, WDCS has funded and conducted extensive research on issues relating to cetaceans in the wild and in captivity, and is recognized internationally as a respected source of information on the scientific, biological, political and legal aspects of cetacean protection. Specifically, WDCS has emerged as a leading authority on marine noise and its impacts within this environment. WDCS has supported over 50 international conservation and field projects, and serves as a global voice for the protection of whales and dolphins and their environment. For more information about WDCS, please visit our website at www.wdcs.org.

WDCS appreciates this opportunity to provide the Minerals Management Service (MMS) with information and concerns relevant to the draft EIS that has been prepared for oil and gas lease sales within the EPA in the Gulf of Mexico. WDCS applauds the MMS in providing a public forum and venue to further the information exchange between concerned and knowledgeable citizenry and the Service in the form of public hearings that occurred earlier in the month. WDCS also supports the development of a final EIS and other necessary and appropriate documentation in compliance with precautionary and mandatory legal requirements under US law, including a final NEPA review for lease sale 197.

WDCS provides these general comments as relevant to all proposed oil and gas development in the Gulf of Mexico OCS, and more pertinently, as a result of oil and gas lease sales in the Eastern Planning Region.

Proposed Lease Areas and Sperm Whales

Both proposed lease sales occur in, and are considered, deepwater Gulf of Mexico. The deepwater Gulf of Mexico has emerged as a prominent oil and gas province and therefore, has experienced a substantial increase in leasing, exploration, development and production. The EPA extends from the northeastern coast of Alabama southward to the Florida Keys.

Because these lease sale areas occur in deepwater, there is significant likelihood that oil and gas exploration activities hold the potential to impact several species of whales and dolphins, some of them endangered, that inhabit these types of deepwater environments. The animal of primary concern in the Gulf is the endangered sperm whale (*Physeter macrocephalus*). WDCS supports the new research program that is underway in the Gulf of Mexico established upon recommendation of NMFS, MMS and Office of Naval Research to measure underwater noise from oil and gas exploration activities (seismic testing) to determine how marine mammals are being affected. It is believed that approximately 400-600 sperm whales inhabit the Gulf region, but exact population estimates are not currently available. Most of these sperm whales are believed to be resident females and juveniles of mixed gender, with any adult male sperm whales probably migrating sometimes thousands of miles to other waters.

Current calculations reveal a global estimate of as few as 360,000 sperm whales (Whitehead, 2002). This contrasts sharply with previous estimates suggesting between 1.5 and 2 million sperm whales. With such a diminished worldwide population of sperm whales, activities that have the potential to impact a significant and discrete population of primarily female and juvenile whales must be critically evaluated and reviewed.

Sperm whales exposed to man-made noises have been shown to alter their communication behaviors. The sonar used by the oil industry employs equipment that utilizes as many as a dozen boats mapping the Gulf floor at any time. The sonar relies upon pneumatic devices that create air bubbles in the water, causing a 250-decibel explosion upon collapsing. The sound waves reach 30,000 feet to the Gulf floor and are reflected back to the oil-seeking ships above. The sound waves bounce off layers of rock and gravel, allowing a cross-sectional view of sediment where oil and gas might be located. These air guns produce noises several hundred times louder than the minimum noise that causes permanent ear damage to marine mammals. Impacts from these air guns and other exploratory activities might include the displacement of sperm whale groups from their critical habitat, interruption of feeding and breeding behaviors, or more directly, tissue damage from proximity to seismic blasts.

The sperm whale is common in submarine trenches in deep waters at the edge of the continental shelf but may occur inshore where water is deeper than 200 M (655ft). Sperm whales typically dive to depths of 300-600m (985-1,965ft), though evidence suggests that they may dive to depths of a least 3,000m (9,845ft).

In the absence of conclusive data from current research projects aimed at evaluating the impacts of oil and gas exploration activities in the Gulf, and heedful of a significant and discrete population of sperm whales in the lease sale areas, WDCS supports a continuing precautionary approach to any proposals involving the development of mineral and other resources of the OCS in the Gulf of Mexico.

Proposed Lease Areas and Other Species

We would expect proposed seismic surveys to affect a number of other cetacean populations in the region, including those listed as depleted, threatened and/or migratory species. There are 28 cetacean species, one introduced pinniped (California sea lion), and one sirenian species (West Indian Manatee) in the Gulf of Mexico. Many of these species are elusive and inhabit the deepwater areas of the gulf, resulting in an uncertainty in population estimates. Several of these species, including the beaked whales, have shown a high sensitivity to noise events, evidenced by several strandings in response to mid and high-frequency sonar activities in waters worldwide, including the Canaries, Bahamas and Gulf of California.

In deep waters, the pantropical spotted dolphin is the most numerous cetacean species in the Gulf. Baleen whales are occasionally reported in the Gulf. The bottlenose, Atlantic spotted, Risso's and other delphinids such as the pygmy and dwarf sperm whales, Clymene (short-nosed spinners), killer whales and so-called blackfish (pilot whales, false killer whales, etc) can all be found in the deeper waters of the Gulf. Four species of highly-sensitive and secretive beaked whales also occur in the Gulf. Beaked whales are deepwater animals, feeding mainly on fish, squid and deepwater benthic (bottom) invertebrates. Only one species of Baleen whale, the Bryde's whale, resides in the Gulf, and in small numbers of probably less than 100 individuals. However, many baleen whale species transit the Gulf during their migrations. In the Gulf of Mexico, six large whale species [northern right (Eubalaena glacialis), blue (Balaenoptera musculus), fin (Balaenoptera physalus), humpback (Megaptera novaeangliae, sei (Balaenoptera borealis) and sperm (Physeter macrocephalus)] and the West Indian Manatee are protected under the US Endangered Species Act.

As the oil and gas industry moves into deeper water along the continental slope in its continuing search for extractable reserves, information is needed on the distribution, abundance, behavior and habitats of cetaceans, especially large and deepwater species.

Cetaceans are divided into discrete biological populations. Some such populations are known to be genetically distinct. Damage to a single population needs to be considered in the context of the potential loss of a discrete biological entity as well as having implications for a wider species unit. Moreover, a local population of whales is an important component of its ecosystem and damage to this component may have implications for other species and habitats.

Anthropogenic Noise and its Potential Impacts

It is internationally recognized that noise pollution is a far more threatening form of pollution for cetaceans than previously believed. These animals are dependent upon sound for communication and navigation, as well as for other important biological activities including breeding and feeding. Interference with this ability is a potential threat to survival.

The IWC Standing Working Group on Environment Concerns stated in a 1998 report that "... it may not always be accurate to assume no impact is occurring even in the absence of a measured response" (IWC, 1999). Significant research collected in the past few years now indicates that industrial noise may be responsible for displacement from habitat (Richardson et al, 1991;

Richardson et al, 1990; Malme et al, 1983; Simmonds and Mayer, 1997), stranding (Frantzis, 1998; Simmonds and Mayer 1997) and physiological harm (Gordon and Moscrop, 1996).

It is not currently possible to assess the long-term impacts of seismic activity. Long-term consequences of chronic exposure to loud noise could include displacement of prey species, as well as causing shifts in hearing thresholds and auditory damage. For some sensitive species, this damage could occur at short to moderate ranges. Behavioural responses including fright, avoidance and changes in behaviour and vocal behaviour, have been observed in both *Mysticeti* (baleen whales) and *Odontoceti* (toothed-whales) over ranges from tens to hundreds of kilometres (Gordon *et al.*, 1998). Similar effects have also been documented in some fish and invertebrates (Swan *et al.*, 1994).

Further, behavioral response may not always indicate the onset of damage. Marine animals may tolerate high levels of impulsive noise but this may not necessarily mean the long term function of their hearing systems are not being impaired (McCauley and Duncan, 2001).

Arguments suggesting that the noise from seismic surveys are akin to the noise that whales and dolphins produce themselves are misleading and unsubstantiated. Experts in the field have consistently refuted this argument. Vocalization levels in marine mammals are frequently cited as indicating high tolerance for intense sounds (Ketten, 1998). It must be borne in mind that animals, including humans, commonly produce sounds which would produce discomfort if they were received at the ear at levels equal to levels at the production site, and arguments that marine mammals, simply by the nature of their size and tissue densities, can tolerate higher intensities are not persuasive. First, mammal ears are protected from self-generated sounds not only by intervening tissues but also active mechanisms, which do not necessarily provide equal protection from externally generated sounds largely because the impact is not anticipated as it is in self-generated sounds (Ketten, 1998). Ketten (1998) adds that source level calculations for vocalizations recorded in the wild should not be viewed as reliable sensitivity measures.

There are many examples of marine mammals showing avoidance behaviors below the received level of 182dB re 1 μ Pa. For example, studies conducted in Australian waters show that baleen whale species are listed as showing general avoidance of an operating seismic source at 150-164 dB re 1 μ Pa rms (McCauley *et al.*, 2000). Pods containing resting cows showed an avoidance response estimated at 7 - 12 km from the vessel source, others taking some avoidance maneuvers at > 4 km then allowing the vessel to pass no closer than 3 km. A recent study has shown that blue whale vocalizations stop within a 10 km range of seismic surveys (Moscrop and Swift, 1999).

Data collected from the longest term studies of the effects of seismic operations on cetaceans to date have occurred in the Alaskan Beaufort Sea where studies began in the early 1980's. Studies showed that bowhead whales (Balaena mysticete) avoided seismic operations within a few kilometres. Since then, continuing studies have shown that avoidance extended to about 20 km and subtle behavioral reactions may have extended to even longer ranges (Richardson, 1999). Received levels that animals encountered at a distance of 20 km were about 117-135 dB re 1 Pa (rms). Corresponding rms levels at 30 km were about 107-126 dB.

Further, sea turtles noticeably increase swimming behavior at 166 dB re 1 µPa rms, fin-fishes display 'alarm' responses at 156-168 dB re 1 µPa rms and behavioral changes in squid occur from 156-166 dB re 1 µPa rms (McCauley et al., 2000).

Perhaps more importantly, avoidance for fish and squid (the primary mainstay of the sperm whales diet) occurs at 3-5 km. Disruption or displacement of each of these prey species constitutes an indirect but potentially significant threat to sperm whales and other cetaceans that might be feeding in the area.

Cumulative or synergistic impacts of seismic activities in the area, or of oil and gas activities combined with the other uses of this region, need to be more thoroughly evaluated and discussed in supporting documentation.

Mitigation Procedures

WDCS believes that the EIS, and subsequent NEPA review, cannot be expected to fully ensure that no significant impact occurs to the cetacean species in the Gulf of Mexico. Discussions and reviews should be revised to reflect the concerns and uncertainties that surround seismic activities in the marine environment.

WDCS is concerned that recent mitigation measures ordered by the MMS and based on a biological opinion issued by NOAA to protect sperm whales from underwater noise damage were recently 'softened' after protest by Industry representatives who claimed these mitigation measures would be costly, prohibitive and impossible to monitor (Fletcher, 2003). These mitigative measures were based on noise levels of 180 dB in waters of 200m or greater, and would have provided a required exclusion zone for whales around an airgun source. Under the softened MMS requirements, seismic workers must visually monitor the exclusion zone and adjacent waters, reduced to 500m, for at least 30 minutes to make sure no sperm whale is present before ramping airgun arrays. However, once the array is activated, workers may continue to work at night or in adverse weather conditions that limit visibility as long as the airguns keep generating a minimum 160db of sound, on the theory that keeping a noise source in the water will continue to keep sperm whales out of the affected area.

WDCS supports the *original* NOAA proposal that would have required seismic crews to shut down operations anytime visibility conditions deteriorate to the point that visual monitoring of the affected area is impossible. WDCS is disappointed that the MMS has also ruled that seismic contractors may delegate seismic crew members to conduct the visual monitoring for whales until trained observers can replace them. All seismic vessels are given a 2-month period in which they must have trained observers for visual monitoring. WDCS supports the original NOAA recommendation that NOAA fisheries personnel be on board vessels as required observers, as opposed to the relaxed requirement that enables seismic crew to serve as trained observers upon completion of a training course.

Observer ability will greatly influence the number and viability of sightings made (Gisiner, 1998) and efforts will have to be made to standardize this, in order to achieve consistency and comparability. For example, in the UK, Barton (2001) found that Marine Mammal Observers (MMOs) were at least eight times more likely to spot cetaceans than 'fisheries liaison officers.'

As a result, we believe that the following minimal measures should be considered fundamental to the EIS statement, lease sale language, and subsequent procedural reviews:

1. Upon acquisition of a lease, a detailed report of mitigation and monitoring measures should be provided as part of any exploration plan. A mandatory survey, conducted by trained visual observers, should be included in these plans and instituted in order to monitor cetacean behavior around exploratory activities.

- 2. Where it can not be shown that vulnerable species will not be encountered at night, seismic activities should be operated during day light hours only.
- 3. Supportive technologies such as the use of passive acoustic monitoring should be required. Cetaceans are notoriously difficult to detect, and this is exacerbated by the long periods of time they spend under water. Effectiveness of sightings is increased substantially in some cases with the use of passive acoustic monitoring.
- 4. A safety radius around the seismic vessel should be calculated out to a precautionary and reasonable 3 km observation zone (where avoidance behaviors have been documented for both whale species, and squid and other prey species), within which the received level of dB re 1μ Pa should be monitored and recorded throughout the survey. Results should be included in the MMS inspection program reports.
- 5. Protection should be afforded to all cetaceans, by including all species in the impact and mitigation measures.

WDCS looks forward to providing further comments and assistance as this process moves forward. Upon the anticipated acquisition of a lease, the leaseholder must prepare an exploration plan and submit this for approval to MMS and the relevant state and federal agencies. WDCS would appreciate the opportunity to input during all subsequent stages of evaluation of proposals to develop the OCS in the Gulf region.

With sincerest regards,

Courtney Stark Vail

WDCS, US www.wdcs.org

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Whale and Dolphin Conservation Society

WDCS

The Minerals Management Service (MMS) appreciates the concerns voiced by the Whale and Dolphin Conservation Society (WDCS) and agrees that a precautionary approach to mineral development on the Outer Continental Shelf is needed to ensure the protection and viability of the cetacean community, as well as the entire unique Gulf of Mexico (GOM) ecosystem. The MMS also agrees that the best possible estimates of abundance and distribution is crucial to determining any potential impacts from oil and gas activities on GOM cetacean species, as is data on stock structure and genetic composition of the whale and dolphin populations. For over a decade, MMS has funded and participated in research on the marine mammals in the GOM, usually in partnership with the National Oceanic and Atmospheric Administration (NOAA) Fisheries. Through this research, particularly the Gulf Cetaceans (GulfCet) I, GulfCet II, and Sperm Whale Acoustic Monitoring Program (SWAMP) programs, the diverse cetacean community of the GOM has been documented including the year-round sperm whale population. Many of these cruises collected tissue samples of numerous GOM cetacean species for genetic analysis. It is MMS's understanding that NOAA Fisheries intends to resume its cetacean abundance and distribution data collection with a cruise in the summer of 2003.

The MMS's current research program, Sperm Whale Seismic Study (SWSS), is a multipronged effort involving several government agencies, the United States Navy, academic researchers, and private concerns. The research is addressing many of the concerns voiced by WDCS. While it focuses primarily on the endangered sperm whale and its response (or lack of) to industry activity, definitive measurements of received sound levels, ambient noise, and sources of noise in the GOM are also SWSS research goals that have great importance for all cetacean species.

The WDCS correctly points out that some studies have noted avoidance or other reactions by cetaceans to industry-produced noise; however, other studies have not recorded similar reactions. Sound characteristics in water are greatly impacted by a number of factors including water temperature, salinity, depth, and bottom type. In addition, as MMS has observed using a towed acoustic array, the physical acoustic characteristics of the GOM can differ significantly from other bodies of water where studies have been conducted. The MMS is currently evaluating which GOM cetacean species may be impacted by industry-produced noise; there is also a research component to study sperm whale prey (squid) in the summer 2003 SWSS program. Furthermore, industry will partner in the cetacean research effort by reporting to MMS sightings of protected species in the GOM. This is noted in current and upcoming Notices to Lessees and Operators (NTL).

The analysis of cumulative impacts on marine mammals is presented in **Chapter 4.5.5.** of the draft environmental impact statement (pages 4-195 through 4-202). The MMS believes this analysis is thorough and reflects the most current research on marine mammals. As with all of our environmental and socioeconomic resources, MMS scientists will update this analysis to reflect the conclusions of future research.

With respect to WDCS's comments on the establishment and implementation of mitigation measures, NOAA Fisheries sets forth nondiscretionary Terms and Conditions in its Biological Opinions. The MMS, in partnership with NOAA Fisheries, implements these requirements through various mechanisms such as NTL's. While MMS does communicate with NOAA Fisheries on oil and gas industry activities, any change in a NOAA Fisheries proposal is a NOAA Fisheries action.

The MMS does not agree with WDCS that reworking and rewording mitigation procedures to best achieve a desired outcome is "softening." The MMS tries to formulate

mitigations that are feasible and practical. Imposing regulations that are impossible to comply with or that will not accomplish the intended goal is a waste of time and money that would be better directed to the protection of the resources. The MMS is very satisfied with the mitigations that have recently been implemented addressing marine debris, vessel strikes, and seismic operations. These mitigations include ongoing reporting requirements. By gathering as much information as possible through both mitigation reporting and research, and adjusting mitigations as the reporting and research indicates, MMS intends to fulfill its mission of overseeing the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil, and other mineral resources.

Shell Exploration & Production Company



One Shell Square PO Box 61933 New Orleans LA 70161-1933 (504) 728-6982

Peter K. Velez Manager Regulatory Affairs

January 22, 2003

Regional Supervisor, LE (MS 5410)
Office of Leasing and Environment
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

SUBJECT: Comments on Minerals Management Service's Draft Environmental Impact Statement for Proposed Federal Oil and Gas Sales 189 and 197 in the Eastern Gulf of Mexico

Dear Sir:

On behalf of Shell Exploration & Production Company and its exploration and production subsidiaries and affiliates (all referred to as Shell), we are pleased to respond to the Minerals Management Service's (MMS) call for comments regarding the Draft Environmental Impact Statement (DEIS) for Lease Sales 189 and 197 scheduled for 2003 and 2005, respectively, in the Eastern Gulf of Mexico (GOM) Planning Area. With respect to detailed comments, Shell participated in the development of comments submitted by the American Petroleum Institute and endorses those comments.

The MMS has done a commendable job in preparing this detailed DEIS. It is comprehensive, balanced, and evaluates in detail a vast array of issues related to Outer Continental Shelf (OCS) operations and their potential environmental impact to both offshore and onshore areas. The DEIS analyzed in detail many resources and activities including coastal environments, offshore resources, water and air quality, marine mammals, sea turtles, coastal and marine birds, fisheries, recreational resources, archaeological resources, and socioeconomic activities. Shell believes the document and the scientific data included therein demonstrate that petroleum resources can be developed while ensuring that the GOM ecosystem is protected.

Shell supports MMS' preferred Alternative A as laid out in the DEIS. Furthermore, we recognize the importance of a strong military and are committed to working cooperatively with the military in the Eastern GOM. We strongly encourage the MMS to develop workable lease stipulations that ensure compatible, simultaneous operations by the military and the petroleum industry in the area. Shell does not support Alternative B for these lease sales.

SHELL-1

In addition, we would like to highlight the following issues:

- 1. Evacuation Stipulation. Shell is pleased that the MMS and DOD have worked out the removal of the evacuation stipulation
- 2. Exploratory Operations Drilling Window Stipulation. Shell supports MMS' approach to work with the Operator and DOD on a suitable approach for these activities. The MMS should avoid the addition of restrictions that increase the operating complexities on these blocks.

These lease sales are important for the continued development of the GOM's gas and oil resources. These gas and oil reserves will help industry and the government meet the future energy needs of the United States. Industry has demonstrated that it can explore for and produce offshore resources in a manner that is compatible with and protective of the environment while ensuring the safety of our employees and the public. MMS has played a strong role as a steward of the Gulf making sure that exploration and development activities are conducted in accordance with established laws and regulations.

Sincerely,

Petu K. Veliz / bul P. K. Velez

Manager Regulatory Affairs

Shell Exploration & Production Company

Shell-1

The military stipulations proposed for Lease Sales 189 and 197 are the same as those adopted for the year 2001 Eastern Planning Area Lease Sale 181. The military stipulations were developed as a result of scoping efforts over a number of years for the continuing Outer Continental Shelf Program in the Gulf of Mexico (GOM) and from specific consultation and coordination with the Department of Defense for Lease Sale 181. It is expected that these measures will serve to eliminate dangerous conflicts between oil and gas operations and military operations in this part of the Eastern Gulf, thus allowing both of these activities to take place without risk to either.

Shell-2

Your comment erroneously cites the "removal of the evacuation stipulation." It is true that the "Military Warning Areas Stipulation" for proposed Lease Sales 189 and 197 does not have an evacuation clause versus similar stipulations for Eastern GOM lease sales prior to Lease Sale 181 in year 2001. However, in Lease Sale 181 and proposed for Lease Sales 189 and 197, the Minerals Management Service has a separate evacuation stipulation that applies to Eglin Water Test Areas. The invocation of these evacuation requirements, however, is expected to be rare.

de ja vu

January 9, 2003

Minerals Management Service
Gulf of Mexico OCS Region
Office of Flasury or Environment
Attn: Regional Supernoon (M55410)
1201 Elmwood Park Blth
New Orleans, LA 70123-2394

My book A GALFly's Memoirs in a Chronicle how coastal heroes stopped mobil Dil From Dulling in Mobile Bry for 10 years because of the extreme-Opensions and these remain Viable in 2003. For 30 years as a local constal alabamen and President of the Mobile Brog Andubon Society my life along with many others in the latter part by the last century was to promote, direct and encourage visionary planning in the promation of the needs for people and the nation and also balence the scale and protect our Quality of Tipe Support Systems. MMS points out the need for new galfly's to stop this continued - ideatic - immorel thousand for dulling in the Gulf of Mexico. See page 135-136 - This Department needs to he removed - restructured to promote a Anows of the serious threats and impacts associated with dulling in marine waters But apparently continue to ignore their

2

responsibilities to protect the natural world which then provides protection to the Tunan Juston. A properly deapted and acceptable energy plus place this teatron in a leadership role Agrin - also provide economic benefits toall Which includes petrolum souts - provide job-protect the earth and provide slean energy -you know this and so do I and a lot of other indereducts - Arillary in marine waters is in my opinion in humane. This area (Mobile + Baldwin Countres) are under ogone alerto because politicians and agencies (State, local + Federal) do not have a respectful or responsible tendency to take ger pages on the greeky petroleum gints - People in Our area took on molul Dil and Lecause of the sceagured threats and impacts from duties Herations were able to stop this guil from reep put in place the condition of the to ump Clause - So Things can trappen when people set sich and tired of Fusines as usual by agueus such as this department We hund these are serious and potentially catastrophic danger in allowing petroleum companie more leases -Ace pg 29 30, 31, 32 (pc 30° Cucle of Death" Dr Mais Blume's scientific furling in 1971 remain true to this dry - pg 9-10-11-12-13

3

part EIS'S on bulf of Mexico leasur I read through the reduculous and only planned proposals to open new areas ploisting with all of the recogniz ouses avall costs role in this department and relationship with oil for longemo, I was also a quest ou several occassions plists on your or the petrole Company's red carpet Theliocopter & nis in the Gulf so I auon how this work as one who served on the Al Forese Wild Program I neognize the futility in turing to get our elected Afficials to sphool your continues movees as the State enjoy receiving royalty Monies so they can bicher one volo will receive these elusive monies - as reserves will dimmoh and disappear - There someone will have to put together an acceptable energy plan Hast doesn't depend on polluting deptetable resources ouch as oil + so Redge wood or Daphal, Af 36526 My copy of A GAStly's Memores are to he comments for the open record? as opposing continued leasing in the Gulf!

de ja vu

Minerals Management Service Gulf of Mexico OCS Region Office of Leasing and Environment Attn: Regional Supervisor (MS 5410) 1201 Elmwood Park Blvd New Orleans, LA 70123-2394 January 9, 2003

My book <u>A Gadfly's Memoirs</u> is a chronicle of how coastal heroes stopped Mobile Oil from drilling in Mobile Bay for 10 years because of the extremely potential for catastrophic impacts from drilling operations and these remain viable in 2003.

For 30 years as a local coastal Alabamian and President of the Mobile Bay Audubon Society my life along with many others in the latter part of the last century was to promote, direct and encourage visionary planning in the promotion of the needs for people and the nation and also balance the scales and protect our Quality of Life Support Systems. MMS points out the need for new gadfly's to stop this continued – idiotic – immoral thrust for drilling in the Gulf of Mexico.

See page 135-136 – This Department needs to be removed – restructured to promote a proper national energy plan – The agency knows of the serious threats and impacts associated with drilling in marine waters but apparently continue to ignore their responsibilities to protect the natural world which then provides protection for the human factor. A properly drafted and accepted energy plan would place this Nation in a leadership role again – also provide economic benefits to all – which included petroleum giants – provide jobs protect the earth and provide clean energy – You know this and so do I and a lot of other individuals – [in margin: Air pollution impacts: pg 125] Drilling in marine waters is in my opinion inhumane.

This area (Mobile & Baldwin Counties) are under ozone alerts because politicians and agencies (state, local & federal) do not have a respectful or responsible tendency to take on the greedy petroleum giants – [in margin: See pages 89, 90, 91] People in our area took on Mobil Oil and because of the recognized threats and impacts from drilling operations were able to stop this giant from getting their permit for 10 years and then help put in place the condition of the No Dump Clause – So things can happen when people get sick and tired of business as usual by agencies such as this department –

We know these are serious and potentially catastrophic dangers in allowing petroleum companies more leases –

See pg 29, 30, 31, 32 (pg 30 "Circle of Death" Dr Max Blumer's scientific findings in 1971 remain true to this day – pg 9-10-11-12-13 Of course you can also review those many past EIS's on Gulf of Mexico leasing as I read through the ridiculous and poorly planned proposals to open new areas for exploration with all of the recognized dangers at all costs – just to continue your role in this department and relationship with oil-gas companies. I was also a guest on several occasions and took flights on your or the petroleum company's "red carpet" helicopter flights to rigs in the Gulf so I know how this works!

As one who served on the Al. Forever Wild Board Program I recognize the futility in trying to get our elected officials to oppose your continued process as the State enjoys receiving royalty monies so they can bicker over who will receive these elusive monies – as reserves will diminish and disappear – then someone will have to put together an acceptable energy plan that doesn't depend on polluting depletable resources such as oil and gas.

Sincerely

Mrs. Myrt Jones

257 Ridgewood Dr.

Daphne, Al 36526

My copy of <u>A Gadfly's Memoirs</u> are to be comments for the open record? As opposing continues leasing in the Gulf.

[in margin: In today's time a proper energy plan would negate the need to send our men and women to fight wars in places like Iraq!

MJ-A1

Myrt Jones, January 9, 2003

wyrt Jones, January 9, 2003

The Department of the Interior (DOI) is aware of the "threats and impacts associated with drilling in marine waters." This environmental impact statement, as mandated by the National Environmental Policy Act, presents impact-producing factors associated with a proposed action (**Chapters 4.1. and 4.3.**). These factors are used in the analysis of the potential impacts of a proposed action (**Chapters 4.2. and 4.4.**). The DOI incorporates this analysis into decisions concerning the program, the lease sales, and individual activities. It also shows up in the formulation of deferral alternatives in some cases and mitigation measures in all cases.

The DOI's sole responsibility is not only to "protect the natural world." Under the Outer Continental Shelf (OCS) Lands Act of 1953, the DOI is charged with managing the exploration and development of mineral resources on the Federal OCS. The Secretary of the Interior vested this responsibility in the Minerals Management Service (MMS). In managing OCS activity, MMS has two core responsibilities which are offshore safety and environmental protection. The safety goal is to ensure incident free minerals exploration and development on Federal Offshore Leases. The environmental objective is to ensure that all activities on the OCS are conducted with appropriate environmental protection and impact mitigation.

- A national energy plan has been drafted and put into effect. The plan recognizes that alternate means of energy generation needs to be looked at for the long term, but it also recognizes that the Nation is largely powered by oil and natural gas. It will be many years until that dependency can be changed. Therefore, the DOI's current mandate is to make available to the Nation, through its lease sale program, OCS oil and natural gas resources in as environmentally safe a manner as possible.
- MJ-A3 The proposed action does not consider, nor does any alternative, "open[ing] new areas for exploration." The proposed lease sale area is the same area offered under Lease Sale 181 in 2002.

Jan 11, 2003 & Hommond EVE MMS-GOJM-OCSREG. office & Feisure + # Environment Enforcement 3 Men Orleans, LA 70123-2394 MM5's 60 MOCS ON & Ferre Jales 189 and 197 - Eastern Planning area. In quickly looking Harris The DEIS I suggested at the public hearing? in Mobile Fulay that MMS reference area was remiss in not recognize and including the mobile legistice rumerous lengthly articles on the mercury Cortamination of our reaford in the July of Mexico, around the mineraus rise - I carrielly moutioned and directed attention to the pages in my took a Gadfly's Menins - to the legition De 30,001 July Rigs : Island of Contamination. I come across another mobile register Upril 14, 200 2 Could sigs turn Full with Superfacel There are more recent articles and I would imagine They are all on the website- I fait have alongon ter - but as I mentioned coastal Al; are being Warned not to eat the Contaminated seeford found in our value as they could pose org resicant health theats , One can't Coultine to heep their head Juned in

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No wonder & fund reading these documents

MJ-B(

Jan 11, 2003

J Hammond Eve MMS – G of M – OCS Reg Office of Leasing & Environment "Enforcement" 1201 Elmwood Park Blvd New Orleans, LA 70123-2394

I am requesting a copy of the FEIS on MMS's G of M OCS O&G Lease Sales 178 and 197 – Eastern Planning Area.

In quickly looking through the DEIS I suggested at the public hearing? in Mobile Friday that MMS reference area was remiss in not recognizing and including the Mobile Register's numerous – lengthy articles on the mercury contamination of our seafood in the Gulf of Mexico around the numerous rigs – I casually mentioned and directed attention to the pages in my book <u>A Gadfly's Memoirs</u> – to the Registers' Dec 30, 2001 <u>Gulf Rigs: Islands of Contamination</u>.

I came across another Mobile register April 14, 2002 Could rigs turn Gulf into Superfund site?

There are more recent articles and I would imagine they are all on the website – I don't have a computer – but as I mentioned coastal Al.'s are being warned not to eat the contaminated seafood found in our waters as they could pose significant health threats. One can't continue to keep their heads buried in the sands – and believe what the industry states for the record – as the Al Petroleum individual said = "our scientific data shows there's no problem". These people have misrepresented facts for years and its unbelievable how responsible – intelligent bureaucratic individuals allow them this much leeway – when peoples very lives are at stake?

I am well aware MMS tried to impose the No Dump Policy in federal waters & the industry threatened lawsuits – but the agency has enough data to override these ridiculous and possibly illegal threats as the Nation's marine life & food & human lives are now a very serious threat & MMS has a moral & ethical responsibility to override this bloated industry's question – able data & threats & impose stringent & regulated conditions – Jailing a few violators would get the point across – especially the CEO's. They are found to be quite capable of violating people's trust – The recent lawsuit over Exxon Mobil dispute in oweing Alabama 87.7 million in royalties shows clearly they can't be trusted! The resent Administration makes it extremely difficult to take on energy companies but they (Presidents) come & go – The Dept of Interior remains and have the capability to override & exert its powers – so what will happen?

Myrt Jones 257 Ridgewood Dr Daphne, Al 36526

PS I was disappointed in your response regarding my quest "Are hard bottoms involved in the lease areas?" You weren't sure? These have been recognized for 10-20 years to be found off our coasts and are extremely sensitive vital areas for recreational – commercial fisheries similar to coral reefs – They should not have been ignored in the beginning – before any leasing was considered as this in my opinion was in violation of federal law and this question should be answered in full as part of the review of sensitive areas to be avoided in the FEIS

With this lack of data and the catastrophic potential for additional cumulative impacts on our air pollution problems in coastal Al and the fact that if recoverable resources are discovered additional pipeline corridors will be necessary to pipe the gas/oil to coastal Mobile County where it will be processed – must insist the alternative of no additional lease sale be allowed – It is quite apparent the area in question has enough potential problems posing significant threats from the already leased areas – It would be not only irresponsible but quite possibly illegal and in violation of NEPA and EO regarding Environmental Justice.

I decided to quickly see if hardbottoms are mentioned in the DEIS & they are. See pages 2-12 2-13

I would venture to say that no real investigation was made in the proposed lease sale area previous to the 1st sale to properly identify & protect any hard bottoms either within the area or close proximity so the answer is in the few paragraphs mentioning hard bottoms –

"A new MMS – funded study of these habitats is planned in the near future" – obviously someone wanted monies to do a study – The information at least baseline scientific evidence has already been in place – gathered by the Marine Environmental Consortium on Dauphin Island – Sealab – years ago! So why not gather this data as it is extensive & I used it years ago to help promote the Moratorium in our oceans – years ago.

our oceans – years ago. In reading MMS – DEIS I find it appalling that scientist continue to so do much double talk and not truly recognize that Gulf drilling operations have tremendous – catastrophic impacts on all of our Quality of Life Support Systems & cumulatively – threaten all! This is a ridiculous document and makes one wonder – Who has the gall to write such ridiculous fictional information & yet pose as a true scientist? No wonder I quit reading these documents

MJ-B5

Myrt Jones, January 11, 2003

MJ-B1 The articles you referred to in your letter, as well as many others, were used for research material for this environmental impact statement. The Minerals Management Service (MMS) noted the increased press coverage on mercury in Chapter 4.2.1.11., Impacts on Commercial Fishing. No reference to individual articles was made in the document.

MJ-B2 As discussed in Chapter 1.3., Regulatory Framework, under the Clean Water Act, discharges of pollutants to waters of the United States are under the control of the United States Environmental Protection Agency (USEPA). This includes discharges of drilling muds and cuttings. The MMS strictly adheres to the USEPA's discharge regulations that are discussed in Chapter 4.1.1.4.1., Drilling Muds and Cuttings.

MJ-B3 The MMS believes there was some misunderstanding about the response to your inquiry at the public hearing, "Are hard-bottoms involved in the lease areas?" The response, as documented in the court reporter's transcript, was "Not to our knowledge." This is an accurate statement given there is no indication of any hard-bottom areas in the proposed lease sale area. While hard bottoms definitely exist off the coast of Alabama, these hard-bottom areas, with associated live-bottom communities, are in the much shallower waters of the continental shelf. The shallowest portion of the proposed lease sale area is over 5,240 feet (ft), or almost a mile deep. These water depths cannot support the lush hard-bottom communities that you were referring to on the much shallower continental shelf.

Although there is never a guarantee, and thus our response "not to our knowledge," there are no indications from geophysical records and research that there are any types of deepwater hard bottoms in the proposed lease sale area. The MMS has conducted several studies in the proposed lease sale area, which were described in **Chapter 3.2.2.2.**, Continental Slope and Deepwater Resources. In addition, MMS possesses complete seismic geophysical data for the entire area. There has never been any hard bottom identified in this region, which ranges from over 5,000 ft to over 9,800 ft deep. Furthermore, as an insurance measure, MMS will require remotely operated vehicle surveys at many of the first exploration sites in the proposed lease sale area. This requirement was implemented to verify the conclusions of previous studies and the interpretations of geophysical maps that there are no hard-bottom areas of any kind near the new operations.

MJ-B4 Cumulative impacts to air quality are discussed in Chapter 4.5.1., pages 4-169 through 4-172 of the draft environmental impact statement (EIS). The methodology used for this impact analysis is based on the Offshore and Coastal Dispersion modeling. This analysis indicates that the emissions of pollutants into the atmosphere from the activities associated with the cumulative offshore scenario are not projected to have significant impacts on onshore or offshore air quality for a proposed lease sale because of the prevailing atmospheric conditions, emission heights, emission rates, and the distance of these emissions from the coastline and each other. Onshore impacts on air quality from emissions from cumulative Outer Continental Shelf (OCS) activities are estimated to be within Class II Prevention of Significant Deterioration (PSD) allowable increments. Potential cumulative impacts from a proposed action are well within the PSD Class I allowable increment. The incremental contribution of a proposed action (as analyzed in Chapter 4.2.1.1., Impacts on Air Quality) to the cumulative impacts is not significant or expected to alter onshore air quality classifications.

The scenario for the pipeline aspect of the proposed action is discussed in **Chapter 4.1.1.8.1.**, Pipelines, pages 4-25 through 4-27 of the Draft EIS. Four new pipelines with a total length of 50-800 kilometers are projected as a result of a proposed action. It is

expected that these pipelines will connect to existing or proposed pipelines near the proposed lease sale area (**Figure 4-3**), resulting in no new pipeline landfalls. Therefore, additional pipeline corridors to Mobile County are not projected to result from a proposed action.

MJ-B6

The pages you refer to in **Chapter 2** are the summary of impacts from routine and accidental events to offshore benthic resources (live bottoms, chemosynthetic communities, and nonchemosynthetic communities). The detailed discussion of these impacts on offshore benthic resources can be found in **Chapters 4.2.1.4.** and **4.4.4.** Baseline information can be found in **Chapter 3.2.2.**, which describes the proposed lease sale area and its surrounding environment (pages 3-17 to 3-29 of the Draft EIS).

Hard-bottom sites in the originally proposed Lease Sale 181 area, which was larger than the currently proposed lease sale area and extended into continental shelf waters off the coast of Alabama, were identified and discussed in the Gulf of Mexico OCS Oil and Gas Eastern Planning Area, Final Environmental Impact Statement Lease Sale 181: (USDOI, MMS, 2001e). These hard-bottom sites, all of which are outside of the proposed lease sale area, include the "pinnacle trend" area, the Florida Middle Ground, hard bottoms of the west Florida shelf, and hard bottoms at the head of the DeSoto Canyon. In fact, it was determined that four lease blocks in the original 181 lease sale area contained pinnacle-like features that would not have been protected by the existing stipulations that protected hard-bottom biological resources in the adjacent Central Planning Area (CPA). A new Eastern Gulf Pinnacle Trend Stipulation was created specifically to protect the potentially significant biological assemblages that could occur on these hard-bottom features in Destin Dome Blocks 577, 617, 618, and 661. The final Lease Sale 181 area was considerably reduced in size; the entire shallower continental shelf region was eliminated. The resulting deepwater lease sale area, ranging in depth from 5,000 ft to over 9,800 ft, is the same as that being proposed for Lease Sales 189 and 197, which this document covers. As discussed in response to comment MJ-B4, to MMS's knowledge there are no hard bottoms in the current proposed lease sale area. The EIS for Lease Sale 181 is available through MMS's Public Information Office (1-800-200-GULF) by referencing report number MMS 2001-051.

A new MMS-funded study of non-chemosynthetic community habitats, *Deepwater Program: Characterization of Gulf of Mexico Deepwater Hard-bottom Communities with Emphasis on Lophelia Coral*, is planned in the near future. The study will target deepwater hard-bottom communities in the Western Planning Area (WPA) and CPA, which are a considerable distance from the proposed lease sale area. These communities are related to surface deposits of carbonate related to hydrocarbon seeps, and are not known or expected to occur in the proposed lease sale area. This study would aid in predicting the potential for high diversity communities. The Dauphin Island studies you refer to are from very different habitats in much shallower areas of the continental shelf. The purpose of the new study is to:

- 1. utilize results from previous related work to define and select sampling areas that represent probable areas of exposed hard bottom that is not necessarily associated with active hydrocarbon seepage;
- 2. design and implement submersible survey and sampling techniques that will characterize the types of non-chemosynthetic megafauna communities that live on deep-water hard substrate outcrops; and
- 3. attempt to determine the environmental conditions that result in the observed distribution of high density communities that could be considered important and sensitive to impacts from oil and gas development activities (particularly extensive areas of Lophelia coral).

The study would require the use of a manned submersible for the fine scale observation and sample collections required to describe new, high-diversity biological communities.