



# United States Department of the Interior

MINERALS MANAGEMENT SERVICE  
Washington, DC 20240



MAR 26 2002

The Honorable Richard Shelby  
United States Senate  
Washington, D.C. 20510-0103

Dear Senator Shelby:

Thank you for your letter dated February 14, 2002, concerning the reported high levels of methylmercury present in the Gulf of Mexico around oil and gas platforms. In your letter you also asked what the Minerals Management Service and the Environmental Protection Agency are doing to ensure that methylmercury levels are not elevated in the Gulf of Mexico and that fish populations, in turn, are not adversely affected. It is our understanding that EPA will respond to issues raised in your letter under separate cover since many of them pertain to their regulatory responsibilities.

As you may know, as one of the primary regulators of oil and gas activities offshore, MMS takes seriously its responsibility to ensure safe operations and to protect the environment. As part of that responsibility, we conduct an extensive environmental studies program that examines all aspects of potential impacts from oil and gas activities. With respect to impacts from drilling fluids, MMS and others have looked at this issue on numerous occasions through field studies and information syntheses dating all the way back to the late 1970s. Current regulations are based on the findings of a tremendous amount of scientific research.

Based on the results of this research, we believe that the trace amounts of inorganic mercury found in drilling muds are not accumulating in the food chain. However, in an effort to allay concerns and to further analyze the methylmercury issue specifically in the context of OCS oil and gas activities, we have asked the Secretary of the Interior's OCS Scientific Committee to establish a *Subcommittee on Mercury in the Gulf of Mexico*. The subcommittee will independently review and evaluate information and provide guidance on what actions MMS should take regarding the feasibility, necessity and appropriateness of additional research. The findings of this subcommittee should be available by June 2002. As always, we continue to communicate with state and federal agencies to keep abreast of ongoing research.

In addition, on May 22, 2002, in Herndon, Virginia, MMS will be coordinating a presentation entitled "Mercury in Drilling Muds" that will be given to the Secretary of the Interior's OCS Policy Committee. Speakers from MMS, EPA, and the oil and gas industry will discuss the issue and provide the latest available information. You or members of your staff are welcome to attend this public meeting.



The Honorable Richard Shelby

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Please be assured that we will keep you fully apprised of these activities and any forthcoming recommendations. Also, as background information, enclosed is a more technical discussion of the mercury issue.

Again, thank you for your letter and your interest in the offshore oil and gas program. If you have any questions or need additional information, please do not hesitate to call me at (202) 208-3500, or Ms. Lyn Herdt, Chief, Office of Congressional Affairs, at (202) 208-3502. We look forward to working closely with you in the future on this and other issues of interest.

Sincerely,

A handwritten signature in black ink, appearing to read "Johnnie Burton", with a long horizontal flourish extending to the right.

R. M. "Johnnie" Burton  
Director

Enclosure

Copy to: The Honorable Christine Todd Whitman  
Administrator  
U.S. Environmental Protection Agency

### **Background Information—Mercury Associated With Offshore Oil and Gas Operations**

The only mercury released into the Gulf of Mexico during oil and gas exploration and development is as a trace contaminant of barite, which is found in muds used during drilling. The Environmental Protection Agency discharge regulations require all barite to contain less than 1 part per million (ppm) of mercury. The form of mercury found in barite is only minimally reactive/soluble in the marine environment and therefore should not be available for uptake by fish and other organisms.

The MMS has studied the impacts from oil and gas platforms sufficiently to conclude that the trace amounts of inorganic mercury contained in drilling muds are not accumulating in the food chain. In sediments, the methylmercury content is a very small percentage of total mercury. Therefore, the total mercury concentration in sediments cannot be assumed to be methylmercury, the form that accumulates in the food chain.

The MMS study mentioned in recent newspaper articles was the *Gulf of Mexico Offshore Operations Monitoring Experiment (1995)*. Contrary to what was implied in the articles, the study found that total mercury ranged from 0 to 3.5 ppm in the 762 sediment samples collected. Any methylmercury concentration would have been far less than the total mercury concentration. Extremely high total mercury levels in sediments have never been discovered around oil and gas platforms. No sample collected to date has warranted additional analyses to look for methylmercury.

Barite is not the only source of mercury in the Gulf of Mexico. Gulf sediments have a natural background level of about 0.12 ppm. In addition, mercury has entered the Gulf through past practices of regional industries. For example, mercury was released to the environment by paper mills, through use as a fungicide on rice crops, and by chlor-alkali plants.

Mercury continues to be released globally into the atmosphere through the combustion of fossil fuels and trash burning. Atmospheric mercury can be carried long distances by winds and is ultimately deposited onto land and water via rainfall. Atmospheric mercury is more likely to be in a form that is readily methylated and will bio-accumulate. A large amount of mercury also enters the Gulf of Mexico from runoff from the Mississippi River.