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U.S. Department of the Interior Minerals Management Service Gulf of Mexico OCS Region

Special Information

Contact: Debra Winbush (281) 873-1858

> Caryl Fagot (281) 873-1859

Evaluating Sublethal Effects of Exposure to Petroleum Additives on Fishes Associated with Offshore Platforms

OCS Study MMS 2005-054

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, Evaluating Sublethal Effects of Exposure to Petroleum Additives on Fishes Associated with Offshore Platforms.

Deepwater petroleum production requires that a number of additives, such as ethylene glycol and methanol, be transported and stored offshore in large quantities. Although these additives may not be highly toxic per se, it is important to evaluate and understand the exposure to marine organisms from potential spills, especially to fishes that often associate with oil production facilities. Juvenile Florida pompano, *Trachinotus carolinus*, were used in three separate controlled experiments to test the sublethal effects of 3.0% ethylene glycol (EG), 1.07% methanol (MeOH), and a combination of the two chemicals (EG + MeOH) on the swimming performance of individual fish. An additional ethylene glycol exposure experiment was conducted on a second species, juvenile Atlantic spadefish, *Chaetodipterus faber*. During the 24-hour exposure period for each experiment, the fish displayed lethargic behavior, indicating a reduced ability to swim. Recovery was observed when the fish were subsequently exposed to clean seawater.

This report is available only in compact disc format from the Minerals Management Service, Gulf of Mexico OCS Region, at a charge of \$15.00, by referencing OCS Study MMS 2005-054. The report may be downloaded from MMS website through the <u>Environmental Studies Program Information System (ESPIS)</u>. You will be able to obtain this report also from the National Technical Information Service in the near future. Here are the addresses. You may also inspect copies at selected Federal Depository Libraries.

Minerals Management Service Gulf of Mexico OCS Region Public Information Office (MS 5034) 1201 Elmwood Park Boulevard New Orleans, Louisiana 70123-2394 Telephone requests may be placed at

U.S. Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, Virginia 22161 (703) 487-4650 or FAX: (703) 321-8547 Rush Orders: 1-800-336-4700

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MMS, an agency of the U.S. Department of the Interior, manages offshore oil and gas exploration as well as renewable and alternative energy sources such as wind, wave, and solar on 1.76 billion acres of the Outer Continental Shelf while protecting the human, marine, and coastal environments. The OCS provides 30 percent of oil and 21 percent of natural gas produced domestically, and sand used for coastal restoration. MMS collects, accounts for, and disburses mineral revenues from Federal and American Indian lands, and contributes to the Land and Water Conservation Fund and other special use funds, with Fiscal Year 2005 disbursements of approximately \$9.9 billion and more than \$153 billion since 1982.

MMS Main Website: <u>www.mms.gov</u> Gulf of Mexico Website: <u>www.gomr.mms.gov</u>

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