

# Technical Announcement

MMS

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

Date: April, 2007

Contact: Caryl Fagot  
(504) 736-2590

## ***Annotated Bibliography of the Potential Environmental Impacts of Chlorination and Disinfection Byproducts Relevant to Offshore Liquefied Natural Gas Port Facilities***

### **[OCS Study MMS 2006-071](#)**

The Minerals Management Service (MMS), Gulf of Mexico OCS Region, announces the availability of a new study report, *Annotated Bibliography of the Potential Environmental Impacts of Chlorination and Disinfection Byproducts Relevant to Offshore Liquefied Natural Gas Port Facilities*.

This annotated bibliography provides the abstracts of peer-reviewed and non-peer-reviewed research and “grey literature” (government documents and conference proceedings) concerning marine and estuarine water chlorination and coastal/marine pelagic communities within the north-central Gulf of Mexico. The effects of chlorinated waters and their resultant disinfection byproducts, especially as they relate to marine and estuarine ichthyoplankton and zooplankton likely to be entrained within the intake water of offshore liquefied natural gas (LNG) port facilities, are described.

The importation of LNG via carrier to deepwater ports is a new activity in the Gulf of Mexico. The gas that is cooled to liquid form prior to transport must be warmed to a gaseous state prior to entrance into the existing pipeline infrastructure. In an open-loop system, water is drawn from the Gulf and passed through a system to warm the liquefied gas and then discharged back into the Gulf. Sodium hypochlorite is added to prevent biofouling, and various disinfection by-products may form. The reported daily water requirement for a single facility is in the range of 70 to 200 million gallons per day.

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 2006-071. The report may be downloaded from the MMS website through the [Environmental Studies Program Information System \(ESPIS\)](#). 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  
(504) 736-2519, 1-800-200-GULF, or  
FAX: (504) 736-2620

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

**MMS Main Website: [www.mms.gov](http://www.mms.gov)**  
**Gulf of Mexico Website: [www.gomr.mms.gov](http://www.gomr.mms.gov)**