

**"ENVIRONMENTAL AND ECONOMIC ASSESSMENT OF
DISCHARGES FROM GULF OF MEXICO REGION
OIL AND GAS OPERATIONS"**

Contract Number: DE-AC22-92MT92001

MT92001-20

A/96-97

DOE/MT/92001--20

Continental Shelf Associates, Inc.
759 Parkway Street
Jupiter, Florida 33477
(407) 746-7946

24 November 1997

Contract Date: 23 June 1992

Anticipated Completion Date: 30 June 1997

Government Award for Current Year: \$4,896,674

Program Manager and Principal Investigator:

David A. Gettleison, Ph.D.
Continental Shelf Associates, Inc.

RECEIVED
APR 15 1998
OSTI

Technical Project Officer (COR):

Rhonda P. Lindsey, BPO
Contracting Officer's Representative
U.S. Department of Energy
Bartlesville Project Office
220 N. Virginia Avenue
Bartlesville, Oklahoma 74003
(918) 337-4407

MASTER

Yearly Summary Report (July 1996 - June 1997)

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

US/DOE Patent Clearance is not required prior to publication of this document.

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible electronic image products. Images are produced from the best available original document.

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
INTRODUCTION	2
PROJECT DESCRIPTION	3
PROJECT STATUS	4
PLANNED ACTIVITIES	5
SUMMARY	6
REPORT DISTRIBUTION LIST	7
REFERENCES (NONE)	
PUBLICATIONS (NONE)	

EXECUTIVE SUMMARY

Tasks 3 (Environmental Field Sampling and Analysis of NORM, Heavy Metals, and Organics) and 4 (Monitoring of the Recovery of Impacted Wetland and Open Bay Produced Water Discharge Sites in Coastal Louisiana and Texas) activities involved continued data analysis and report writing. Task 5 (Assessment of Economic Impacts of Offshore and Coastal Discharge Requirements on Present and Future Operations in the Gulf of Mexico Region) was issued as a final report during the previous reporting period. Task 6 (Synthesis of Gulf of Mexico Seafood Consumption and Use Patterns) activities included the preparation of the final report. There were no Task 7 (Technology Transfer Plan) activities to report. Task 8 (Project Management and Deliverables) activities involved the submission of the necessary reports and routine management.

INTRODUCTION

This report represents the annual Summary Report for the study "Environmental and Economic Assessment of Discharges from Gulf of Mexico Region Oil and Gas Operations." Activities associated with Tasks 3, 4, 6 and 8 are discussed in this report.

PROJECT DESCRIPTION

Continental Shelf Associates, Inc. (CSA) was contracted to conduct a three-year study of the environmental and health related impacts of produced water and sand discharges from oil and gas operations. Data on naturally occurring radioactive materials (NORM), heavy metals, and hydrocarbons in water, sediment, and biota will be collected and evaluated. Health related impacts will be studied through field collections and analyses of commercially- and recreationally-important fish and shellfish tissues. Additionally, information on seafood catch, consumption, and use patterns for the Gulf of Mexico will be gathered and analyzed. The facilities to be studied will include both offshore and coastal facilities in the Gulf of Mexico. Coastal sites will be additionally studied to determine ecological recovery of impacted wetland and open bay areas. The economic impact of existing and proposed effluent federal and state regulations will also be evaluated.

The primary objectives of the project are to increase the base of scientific knowledge concerning (1) the fate and environmental effects of organics, trace metals, and NORM in water, sediment, and biota near several offshore oil and gas facilities; (2) the characteristics of produced water and produced sand discharges as they pertain to organics, trace metals, and NORM variably found in association with the discharges; (3) the recovery of three terminated produced water discharge sites located in wetland and high-energy open bay sites of coastal Louisiana; (4) the economic and energy supply impacts of existing and anticipated federal and state offshore and coastal discharge regulations; and (5) the catch, consumption and human use patterns of seafood species collected from coastal and offshore waters. The products of the effort will be a series of technical reports detailing the study procedures, results, and conclusions which contribute to the transfer of technology to the scientific community, petroleum industry, and state and federal agencies.

PROJECT STATUS

Tasks 3 and 4 activities involved submission of the draft and final reports to the Scientific Review Committee and the Document Control Center (DCC). The final report for Task 6 was delivered to the DCC.

Task 8 activities involved the submission of the required reports, project management and cost plans, and routine management. A request for a no-cost extension to 30 June 1997 was approved by the Department of Energy by Modification MO12.

PLANNED ACTIVITIES

The project has been completed. Close out procedures will be initiated for the project.

SUMMARY

Tasks 3 and 4 activities involved submission of the draft and final reports to the Scientific Review Committee and the Document Control Center (DCC). The final report for Task 6 was delivered to the DCC. Task 8 activities involved the submission of the management reports, routine management, and the approval of a no-cost schedule extension request.

REPORT DISTRIBUTION LIST

Document Control Center
U.S. Department of Energy
Pittsburgh Energy Technology Center
P.O. Box 10940, MS 921-118
Pittsburgh, PA 15236-0940

Three (3) copies