Research Project

01-2SS

<u>capsure</u>



Technology Transfer Program February 2002

Louisiana Offshore Terminal Authority (LOTA) Environmental Monitoring: Marine/Estuarine

Starting date: 6/07/01

Duration: 14 months

Completion date: 8/06/02

Funding: LOOP

Principal Investigator: Carl M. Way, Ph.D. Barry A. Vittor & Associates, Inc.

(334)633-6100

LTRC Contacts:

Administrative:

Harold "Skip" Paul, P.E. Assoc. Director, Research (225)767-9102

Technical:

Art Rogers, P.E. Research Manager (225)767-9166



LTRC



Louisiana Transportation Research Center

Sponsored jointly by the Louisiana Department of Transportation and Development and Louisiana State University

4101 Gourrier Avenue Baton Rouge, LA 70808-4443

Problem

The purpose of this research project is to determine if the construction and operation of the Louisiana Offshore Oil Port (LOOP) facility has impacted the surrounding marine/estuarine environment. The Louisiana Offshore Terminal Authority (LOTA) began an environmental monitoring program prior to construction of the LOOP facility, and this research project is a continuation of that effort.

Objectives

The objectives of the environmental monitoring program include:

- 1) Maintenance of seasonal environmental and ecological data so that conditions existing during operations of the deepwater port can be related to historical baseline conditions.
- 2) Detection of any adverse alteration or damage to the environment during operations of the deepwater port so



Packaging of Water Samples

February 2002

that corrective action can be taken as soon as possible.

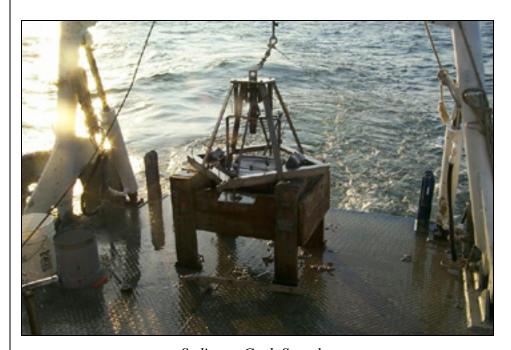
- 3) Maintenance of sufficient data to determine the cause of environmental alteration or damage so that responsibility can be properly placed.
- **4)** Provision of information for the evaluation of long- and short-term impacts of the deepwater port.

Description

The current LOOP environmental monitoring program includes seasonal monitoring of aquatic and marine resources, sediment composition, and water quality, on a five-year cycle. The monitoring program was designed to provide a measure of natural environmental variability in the project area and to identify environmental impacts that could occur due to offshore vessel operations, brine discharge, storage facility operations, and pipeline construction and operation. The data obtained from this research project provides an update to existing longterm LOOP data collected annually from 1979 to 1994.

Implementation Potential

Throughout this project, water quality will be monitored in the area surrounding the LOOP facility in order to address environmental concerns expressed by the Louisiana state legislature. If a detrimental environmental impact is identified, required corrective actions will be recommended for implementation.



Sediment Grab Sampler