

Innovative Tool for Information on Drilling Waste Management

In June 2004, EVS launched an innovative, interactive website to provide technically sound, unbiased information about drilling waste management options. The website, known as the Drilling Waste Management Information System (DWMIS), can be accessed at: <http://web.ead.anl.gov/dwm>. The DWMIS website is designed to provide tools and information that meet the practical needs of users, including:

- Technical information about drilling waste management options,
- Access to federal and state regulatory requirements, and
- An easy-to-use tool for selecting possible options for a user's specific situation.

PROBLEM/OPPORTUNITY

Drilling waste management practices vary by region and are governed by regulatory agencies charged with the protection of human health and the environment. Within the United States, regulations that address the environmental issues of each geographic location vary by state. Regulations for offshore and international drilling waste management vary as well. DWMIS benefits both small independent and large multinational operators by providing easy access to U.S. regulations and waste management options, thus allowing them to choose the option with the most environmental and economic benefits. The regulatory information, with links to agency websites, is a particularly valuable resource. The website also provides unbiased information to countries developing drilling waste regulations so that the countries have a basis for allowing operators to use the most economic, environmentally appropriate waste management options, rather than restricting operators to only those options that are commonly used in a particular country.

APPROACH

DWMIS contains three main components.

- **Technology Description Module.** This module provides basic information about practices that are currently employed to manage drilling wastes. The module divides management practices into three sections — waste minimization, recycle/reuse, and disposal. Users can click on any of the listed technologies to access separate fact sheets describing each technology and including references for additional information.
- **Regulatory Module.** The Regulatory Module identifies and summarizes existing state and federal regulations or guidelines that form the regulatory context for drilling waste management. In the federal regulatory section of this page, users can click on links to the U.S. Environmental Protection Agency, Bureau of Land Management, or the Minerals Management Service to be sent to pages that offer more information about each agency's requirements.



A rig hand vacuuming excess drilling mud from the drilling floor at a Gulf of Mexico platform.

In the state regulatory section of the page, users can click on any state on the U.S. map, or select a state from a drop-down list, to be linked to a state summary page that includes information about the agencies that regulate drilling waste management in that state. All of the agency pages contain external links leading to agency websites and to the specific texts of the agencies drilling waste management regulations.

- **Technology Identification Module.** In the interactive Technology Identification Module, users are asked to answer a series of questions (mostly “yes” or “no” answers). The replies to these questions lead users through a decision tree, resulting in a suggested subset of waste management options that would make the most sense for a given geographical or environmental setting. The Technology Identification Module does not attempt to tell a company exactly which technology should be employed; rather, it helps to eliminate options that are not appropriate to the user’s specific location.

EVS collaborated with engineers at ChevronTexaco and Marathon in developing DWMIS.

RESULTS

DWMIS has been very successful since its launch in June 2004. In its first two years of operation, DWMIS received more than 1,100,000 hits from more than 34,000 different visitors.

FUTURE

In June 2006, EVS received new funds from the U.S. Department of Energy to develop a parallel website providing information on produced water management. The new system, the Produced Water Management Information System (PWMIS), will be developed during 2007.