

Information Systems Development

On October 1, 1986, OSMRE established a new Assistant Directorate for Information Systems Management (ISM) - an indication of the importance OSMRE attaches to information systems management and development as a key to the effective administration of SMCRA. During fiscal year 1987, ISM worked on a number of system development projects. The three major development projects during the year are discussed below.

Technical Information Processing System

During fiscal year 1987, OSMRE continued working closely with State agencies in the development of the Technical Information Processing System (TIPS). TIPS is a computer system that provides support for many of the technical analyses performed as part of State and OSMRE regulatory and abandoned mine land reclamation work performed under SMCRA. It includes a broad range of engineering and scientific applications.

TIPS includes a central super mini-computer located at OSMRE's Western Field Operations office in Denver, Colorado, and distributed microcomputer-based engineering work-stations at selected user locations. An array of software will assist staff in such things as ground water modeling, slope stability analysis, subsidence prediction, acid mine drainage modeling, construction cost estimation, land surveying data reduction, blasting impact analysis, statistical analysis, surface water modeling, noise impact analysis, and automated drafting.

OSMRE has worked closely with State representatives on the TIPS Steering Group to identify local user needs. The major coal producing States are represented on the TIPS Steering Group by representatives from the Interstate Mining Compact Commission and the Western Interstate Energy Board.

During fiscal year 1987, OSMRE installed a Prime 9955 host super-minicomputer in Denver, Colorado, and initiated the procurement process for a geologic surface modeling package to process complex scientific and technical mining and reclamation information. OSMRE established seven TIPS prototype work stations in State and Federal offices during the year and began the procurement process for 14 additional work stations. Each work station consists of a 80-386 based central processing unit, color monitor, printer, digitizer, plotter and modem. The work stations are linked to the super-minicomputer via the US Department of the Interior's GEONET telecommunications network.

Coal Data Management Information System

During fiscal year 1987, OSMRE continued planning efforts for the Coal Data Management Information System (CDMIS), a computer system intended to consolidate surface coal mining and reclamation data and information presently maintained in five mainframe systems and a variety of microcomputer systems. CDMIS will integrate regulatory and AML information and define the relationships among major processes and categories of data. In a central database, CDMIS will provide the information necessary to support the actions or decisions of State and Federal regulatory authorities and to assist OSMRE in meeting its responsibilities under SMCRA.

A basic premise underlying CDMIS is that the mining and reclamation process is a continuum, beginning with the submittal of the permit application and ending (years later, in many instances) with bond release upon completion of reclamation. At each step of the mining and reclamation process, action is required by the regulatory authority. CDMIS will provide in a central database the information necessary to support the permitting, enforcement and other actions or decisions of the regulatory authority, and assist OSMRE in meeting its responsibilities under SMCRA. The key features of CDMIS are:

- a unified mining entity identification structure capable of linking together all permitting, bonding, compliance and AML fee information of a single miner;
- a mine registry (common identifier), identifying all mining operations in the US that do business with OSMRE and the States;
- the linking of mining entities through ownership and control information; and
- an integrated Federal accounting system bringing together all OSMRE financial information.

CDMIS will be developed and implemented in a logical sequence of segments or phased sections with several subsystems being developed in parallel. As each phase is completed, tested, and implemented, any existing system that is duplicated will be replaced. During the design and development of the system, OSMRE is involving both OSMRE and State users in a team environment to assist in defining the functional and data requirements and in performing tests.

Applicant Violator System

The Applicant Violator System (AVS) became operational in October 1987. AVS is a computerized system of records used by OSMRE and the State regulatory authorities to control the issuance of coal mine permits. SMCRA prohibits the issuance of permits to applicants with previous violations under the surface mining law that have not been corrected, and to applicants related to violators through ownership and control. AVS was developed to assist OSMRE and the State regulatory authorities in complying with the permit requirements under SMCRA. AVS identifies any possible associations between permit applicants and their affiliates and uncorrected violations of SMCRA. This information is then provided to State and Federal authorities, who then determine whether a permit should be issued or held. AVS also enables OSMRE to meet its obligations under a court order. In 1985, as part of a settlement agreement between OSMRE and several public interest groups, the U.S. District Court for the District of Columbia ordered OSMRE to computerize the system for identifying owners/controllers and violators. To assure nationwide consistency in the permit application review process, OSMRE is developing a regulation defining "ownership" and "control". While work is being completed on this regulation, OSMRE is continuing to rely on the permit blocking criteria contained in Section 507(b)(4) of SMCRA and as stated in the court order.

During 1987, OSMRE completed the entry of data into AVS and completed an acceptance test for the system. The acceptance test, which was a joint effort with the MITRE Corporation, was conducted in a very compressed time-frame. The MITRE Corporation certified that the software was working in accordance with the system design specifications. OSMRE also provided all States with computers linking them to the system. The States and OSMRE have "in-house" access to AVS using personal computers which are connected to a main-frame computer located at the U.S. Geological Survey in Reston, Virginia.

To provide assistance and resolve questions relating to AVS operations or applications, OSMRE has established a special unit in Washington, D.C. called the AVS Clearinghouse. The Clearinghouse provides users immediate assistance by way of a toll-free 800 number.

Table 15
OSMRE Fiscal Year 1987 Budget*¹
(\$ in thousands)

ACTIVITY	FY 1987
Regulation and Technology	
State Regulatory Program Grants	\$43,803
Federal Regulatory Programs	42,213
<i>Regulatory Program Operations</i>	20,116
<i>Kentucky Settlement Agreement</i>	--
<i>Technical Services, Training & Research</i>	14,027
<i>Assessments and Collections</i>	8,070
General Administration	14,312
<i>Executive Direction</i>	1,739
<i>Administrative Support</i>	6,472
<i>General Services</i>	6,101
Total, Regulation and Technology	\$100,378
 Abandoned Mine Land Fund	
State Reclamation Program Grants	\$160,600
Federal Reclamation Programs	37,474
<i>Fee Compliance</i>	5,232
<i>Reclamation Program Operations</i>	22,842
<i>Rural Abandoned Mine Program</i>	9,400
Small Operator Assistance Program	0
General Administration	5,646
<i>Executive Direction</i>	825
<i>Administrative Support</i>	1,992
<i>General Services</i>	2,829
Total, AML Fund	\$203,720
 Total, Office of Surface Mining	 \$304,098

*¹ Represents funds appropriated by Congress for fiscal year 1987.