

**Annual Report of the
U.S. Department of the Interior
Office of Surface Mining**

Fiscal Year 1993



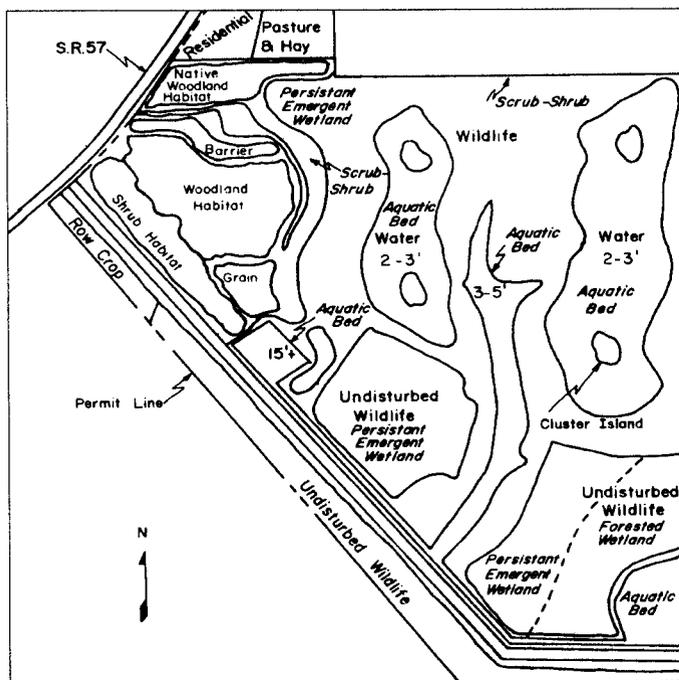
United States Department of the Interior

Bruce Babbitt, *Secretary of the Interior*

Robert Armstrong, *Assistant Secretary for Land and Minerals Management*

Office of Surface Mining

Anne H. Shields, *Acting Director*



(COVER PHOTO) Reclaimed mine land near Buckskin, Indiana.

Southern Indiana is losing thousands of acres of wetlands each year, part of a disturbing national trend. At the turn of the century, this mine site was wetlands. It was drained, then farmed until the mid-1950's. Before mining, seasonal floods were caused by railroad construction, a channelization project, and a blocked drainage tributary.

During the permitting process the Indiana Division of Fish and Wildlife asked the mining company to reconsider parts of its permit application to provide for wetland mitigation. Agreement was reached and a wetland mitigation plan (left) was developed prior to mining and reclamation.

Today the reclaimed mine site includes 110 acres of open water, islands, wetlands, uplands, and forest habitats. These provide transition zones that support long-term, stable wildlife populations. Low-water depths range from 6 inches to 15 feet. Water level is controlled by a permanent levee and spillway structure. This allows spring flood water to reach a design height, yet retains enough water to maintain the wetland during summer droughts.

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Annual Report
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1993**



**United States Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Washington, D.C. 20240
January 1994**

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1. INTRODUCTION

This report was compiled for the President and the Congress as required by Section 706 of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The report describes the operations of the Interior Department's Office of Surface Mining Reclamation and Enforcement (OSM) for the period October 1, 1992, through September 30, 1993 -- Fiscal Year 1993¹. Included in this report are activities carried out under Title IV, Abandoned Mine Reclamation; Title V, Control of the Environmental Impacts of Surface Coal Mining; Title VI, Designation of Lands Unsuited for Non-coal Mining; and Title VII, Administrative and Miscellaneous Provisions.

SMCRA responsibilities of other bureaus or agencies are omitted from this report. Those responsibilities include Title III, the Mining and Mineral Resources and Research Institutes Program, which is administered by the U.S. Bureau of Mines; Titles VIII and IX, the University Coal Research Laboratories and the Energy Resource Graduate Fellowships, which are administered by the Secretary of Energy; and Section 406, the Rural Abandoned Mine Program (RAMP), which is administered by the Secretary of Agriculture. Information about those activities is reported directly to Congress by the agencies responsible for them.

This year's report format is similar to OSM's 1988-89, 1990, 1991, and 1992 annual reports, and facilitates easy comparison of data from year to year. However, one change was made to provide a statistical summary efficiently to both the Congress and the public. The report contains current data and only brief background information. It was prepared primarily for the President, the Congress, and the state regulatory authorities and is not intended for wide distribution to the general public. The condensed format and more specific focus have resulted in production cost savings and strict adherence to the standards of the Joint Committee on Printing for federal agency annual reports. The information in this report is organized to facilitate either an examination of specific elements or a review of the entire program. Each year OSM receives a number of requests for statistical information that describes SMCRA implementation (including mining, regulation, and reclamation). Beginning this year, OSM's annual report to Congress contains a national summary of the past year's statistical information compiled and published as an appendix. Although the annual report will still be printed in limited quantities and distributed mainly to Congress and those directly involved with SMCRA implementation, the statistical appendix to the Annual Report is available to the general public.

Section 2 summarizes OSM's principal accomplishments and outlines issues the agency confronted during 1993. Although these are further described with text and statistics in the body of the report, they are presented here to give the reader both an overview and a summary of OSM's activities during the past fiscal year.

Sections 3 through 6 describe OSM's administration of the SMCRA Regulatory and Abandoned Mine Land Programs. Statistics are provided in tabular form, and, where appropriate, graphs show current and historic levels so that trends since the beginning of the program are readily apparent.

Section 7 cites OSM technical publications, reports, and video programs developed during 1993. This eliminates extraneous text and should aid readers who require more detailed information about OSM operations. Some of these materials are unpublished; however, machine copies are available from OSM upon request.

Appendix (printed under separate cover) contains statistical information in tabular form that provides a state-by-state overview of factors that are directly related to or the result of SMCRA implementation. In addition, a listing of the Office of Surface Mining and state regulatory and Abandoned Mine Land office locations is provided.

For information about OSM activities, news releases, and publications, or for additional copies of this report, contact:

Public Affairs
Office of Surface Mining
1951 Constitution Ave., NW
Washington, D.C. 20240
(202) 208-2553

1. Throughout this document, "1993" always refers to FY 1993, unless otherwise noted.

2. EXECUTIVE SUMMARY

1993 was a year of transition for the Office of Surface Mining. Director Harry M. Snyder resigned January 20, 1993, and Deputy Director W. Hord Tipton served as acting director through the end of the fiscal year. On November 15, Secretary of the Interior Bruce Babbitt named an interim management team for OSM and appointed Anne H. Shields acting Director. On November 19 Robert Uram's nomination to be Director of the Office of Surface Mining was announced. The appointment is subject to confirmation by the U.S. Senate.

During the early part of the year, OSM came under strong criticism from a coalition of regional environmental groups. Most of their criticism focused on regulatory enforcement policies.

Later in the year, under acting Director Hord Tipton, OSM began working more closely with citizen groups that had identified potential inspection problems on active mine sites throughout the country and were raising questions about enforcement policies. This change in direction followed the Clinton administration's commitment to "reinventing government" and reaffirmed the importance of the role public participation plays in carrying out the purposes of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This new direction for OSM resulted in many new activities. Following are brief highlights of 1993:

BUDGET AND FINANCIAL MANAGEMENT

OSM's \$299,646,000 appropriation for 1993 included \$111,716,000 from the General Fund and \$187,930 from the Abandoned Mine Reclamation Fund. In 1993, state regulatory grants were funded at \$51,661,000, the highest level since the inception of the program in 1977.

Under authority of Public Law 101-233, OSM continued to invest abandoned mine land funds. At the end of the year, more than \$1.09 billion was invested, earning \$31.7 million in interest during 1993.

CITIZEN PARTICIPATION

In framing SMCRA, one of the principles that guided Congress was recognition that public participation and involvement are vital to the success of a national surface coal mining regulatory program. Toward that end, Congress imposed several provisions that require and encourage active citizen involvement in the development, revision, and enforcement of regulations, standards, reclamation plans, and programs established by OSM or the primacy states. Involvement by the public helps assure that the regulatory authorities' decisions and actions are based upon full and complete information. In the latter part of 1993, work in this area begun by OSM included:

- Stressing the importance of citizen participation and input into the implementation of SMCRA to all OSM employees and state regulatory authority staff.
- Establishing a tracking system to assure that requests for informal reviews of citizen complaints are handled in a timely manner and that follow-up is accomplished systematically.
- Developing a citizen participation "how-to" document to provide guidance to citizens so they may more effectively participate in SMCRA implementation.

TOTAL QUALITY MANAGEMENT (TQM)

OSM has developed a work plan that adopts the Xerox Corporation model of providing cascade training to managers and their individual work units. During 1993 OSM made major progress toward reaching its TQM goals. There are now over 90 trained facilitators who assure that OSM is not dependent upon outside consultants to continue growth of the program. Nearly all geographic locations have trained facilitators. In 1994 OSM will examine business processes that should be "reengineered" or planned for quality. Like most institutions, OSM processes up to now have been developed ad hoc, without the benefit of quality principles. OSM will continue to address internal processes to meet customer needs and establish quality controls.

APPLICANT/VIOLATOR SYSTEM

The Applicant/Violator System (AVS) is designed to identify any associations between permit applicants or their affiliates and uncorrected violations of SMCRA. Such information is used by OSM and state regulators to determine whether a permit should be issued or denied. In some cases, entities have entered settlement agreements to resolve uncorrected violations so that a permit application may receive a recommendation of conditional issue. Since 1990 over 22,474 permit applications have been reviewed by AVS. To avoid blocked permits, companies have paid over \$4,493,585 in fees, penalties, and interest to resolve outstanding violation cases.

STATE REGULATORY PROGRAMS

All 24 primacy states except Mississippi had active coal mining in 1993. In accordance with SMCRA, the states issued 571 permits, performed 54,075 complete and 73,720 partial inspections, and issued 8,372 notices of violations and 1,102 cessation orders. In addition, during 1993 there were 184 bond forfeitures in nine of the primacy states.

ABANDONED MINE LANDS

The Abandoned Mine Reclamation Act of 1990 requires OSM to maintain an inventory of high-priority abandoned mine land and water problems. This computerized inventory, containing information on 11,300 problem areas, was completed during 1993 and is currently in use.

In 1993 OSM presented its first annual National Abandoned Mine Land Reclamation Awards. Ten award-winning projects were selected and 50 individuals responsible for the work were recognized by the acting OSM director at the September meeting of the Association of State Abandoned Mine Land Programs. These awards acknowledge the extra effort made by people doing the reclamation work and encourage the exchange and transfer of successful reclamation techniques.

3. PROGRAM ADMINISTRATION & FINANCE

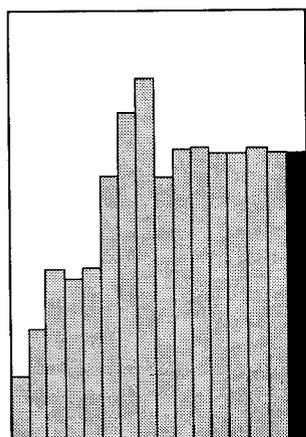
LEGISLATION

On October 24, 1992, the President signed into law the Energy Policy Act of 1992 (Public Law 102-486). Changes to SMCRA implementation enacted in that statute include provisions that:

- Provide incentives to remine and reclaim abandoned mine lands (AML);
- Require the repair of, or compensation for, damages resulting from subsidence;
- Provide assistance to small coal operators;
- Provide Title V grants to Indian tribes; and
- Extend the collection of the abandoned mine reclamation fees through the year 2004.

On October 30, 1992, the President signed into law the Reclamation Projects Authorization and Adjustments Act of 1992 (Public Law 102-575). This law amended the National Historic Preservation Act (NHPA) definition of "undertaking" to include programs subject to state regulation and administered pursuant to a delegation or approval by a federal agency. These amendments to NHPA rendered moot the government's appeal of the *Indiana Coal Council, Inc. v. Babbitt* Nos. 91-5397, 91-5398, 91-5405, 91-5406 (D.C. Cir.) (historic properties rule challenge) decision.

BUDGET AND APPROPRIATIONS



OSM Budget 1978-93

The Department of the Interior and Related Agencies Appropriations Act of 1993 (Public Law 102-381) appropriated \$111,716,271 from the General Fund for 1993 OSM regulatory and enforcement activities. The regulation and technology appropriations included the following provisions:

- Performance bonds forfeited under Section 509 of SMCRA can be used to reclaim lands where the mine operator did not complete performance of all requirements of SMCRA and the permit. Performance bond forfeitures received and credited to this account in

1993 totaled \$178,750. Of current-and prior-year bond forfeitures, \$533,552 was used for reclamation in 1993.

- Federal civil penalties collected under Section 518 of SMCRA can be used to reclaim lands abandoned after August 3, 1977. Civil penalties collected by OSM in 1993 totaled \$294,829. Of current- and prior-year collections, \$333,725 was used for reclamation in 1993.
- State regulatory program grants were funded at \$51,661,116, an increase of \$3,180,116 over 1992.

In addition, \$187,929,901 was appropriated from the AML fund, and up to 20 percent of the funds recovered from the delinquent debts was authorized for continuing collection of those debts. In 1993, OSM spent \$975,000 to collect approximately \$5.1 million in delinquent AML fees and delinquent AML audit bills. The following provisions were included in the AML appropriation:

- State reclamation grants were funded at \$135,793,350, an increase of \$519,350 from 1992.
- No more than 25 percent of the total funds available for emergency reclamation projects was permitted to be used in any one state.
- Federal emergency program expenditures were limited to \$15,000,000.
- Fifty percent of a state's annual AML grant can be denied if the Secretary of the Interior finds the state has failed to enforce provisions of the approved state regulatory program.

All of the appropriation's provisions were met.

Table 1 provides a 1978-1993 appropriation history.

DEBT MANAGEMENT

OSM pursues delinquent debtors who owe civil penalties for mine site environmental violations and unpaid AML fees, including unpaid AML fees resulting from OSM compliance audits. OSM's 1993 collections and the year-end debt are shown in Table 2. Civil penalties include administrative charges and late payment penalties paid to the U.S. Treasury and not available for use by OSM. Delinquent debt information is retained in OSM's Applicant/Violator System to prevent violators from receiving new mining permits until their account are settled. Of the \$87.7 million fiscal year-end 1993 debt balance, \$53.6

TABLE 1
OSM APPROPRIATION HISTORY
1978-1993*
(Dollars in Thousands)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Regulation & Technology																
State Regulatory Grants	\$8,600	\$18,900	\$21,680	\$35,000	\$24,432	\$32,150	\$38,100	\$36,734	\$35,387	\$45,110	\$40,359	\$41,910	\$41,910	\$47,659	\$48,481	\$51,661
Regulatory Program Operations								17,704	19,221	20,078	20,310	20,450	20,450	22,576	21,513	21,457
Tech. Services, Training & Research								12,642	13,681	13,670	13,470	13,026	13,026	13,559	13,472	15,227
Kentucky Settlement Agreement										3,685	4,425	3,772		904		
Assessments and Collections								6,938	7,929	10,502	8,981	9,100	13,078	12,730	9,220	
Program Operations & Inspections						10,493	13,776	23,729								
State & Federal Programs	3,300	4,007	14,352	22,492	15,246											
Inspection & Enforcement	7,520	13,360	16,622	15,717	12,193											
Technical Support	3,260	6,872	7,033	6,841	6,644	10,903	12,551	12,890								
Applied Research	2,500															
Mineral Institutes	5,700	5,800	10,000	9,629												
SOAP		5,000	15,000													
General Administration																
Executive Direction						7,332	6,268	6,994	8,103	14,062	13,831	11,999	12,970	13,067	13,504	14,151
Administrative Support									[1,359]	[1,664]	[1,677]	[1,761]	[1,589]	[1,659]	[1,873]	[2,124]
General Services									[3,425]	[6,297]	[6,856]	[5,649]	[6,487]	[5,908]	[6,123]	[6,050]
									[3,319]	[6,101]	[5,298]	[4,589]	[4,894]	[5,500]	[5,508]	[5,977]
Subtotal	30,880	53,939	84,687	89,679	58,515	60,878	70,695	80,347	80,774	100,003	102,125	101,095	101,228	110,843	109,700	111,716
Abandoned Mine Reclamation Fund																
State Reclamation Grants	10,000		25,000	26,200	46,936	173,528	233,100	236,840	149,441	160,600	159,660	151,660	145,780	149,214	135,274	135,794
Fund Management	4,784	8,680	9,124	9,987	6,794	5,131	6,498	6,599								
Fee Compliance									2,680	3,482	5,588	5,681	5,720	6,088	6,408	6,644
Reclamation Program Operations	15,875	21,835	39,376	29,364	41,680	23,064	26,452	39,371	28,715	24,592	13,662	19,005	22,264	25,238	27,154	25,137
AML-Technical Support	998	808	1,237	1,652	1,584	991	1,221	1,955								
RAMP	5,000	10,128	10,106	10,280	18,339	6,155	10,582	9,800	9,019	9,400	15,000	12,000	12,000	11,933	11,848	13,385
SOAP	10,000	10,000	10,000	5,000		(11,499)	(2,000)	2,949	2,949	4,473	5,646	4,814	5,008	4,993	5,268	5,210
General Administration						4,210	4,874	4,376	4,473	8,251	8,801	8,661	8,731	9,191	9,050	8,881
Executive Direction									[794]	[825]	[880]	[866]	[873]	[919]	[1,050]	[888]
Administrative Support									[1,912]	[1,992]	[2,311]	[1,692]	[1,711]	[1,509]	[1,649]	[1,469]
General Services									[1,767]	[2,829]	[2,279]	[2,256]	[2,424]	[2,565]	[2,569]	[2,853]
Subtotal	36,657	61,451	94,843	82,483	115,333	213,079	271,228	296,941	197,277	203,720	199,380	193,160	192,772	198,958	187,803	187,930
Total	\$67,537	\$115,390	\$179,530	\$172,162	\$173,848	\$273,957	\$341,923	\$377,288	\$278,051	\$303,723	\$301,505	\$294,255	\$294,000	\$309,801	\$297,503	\$299,646

*Does not include Bond Forfeiture and Civil Penalty collections

million (61 percent) is principal. The remainder represents interest, late payment penalties, and administrative charges on unpaid balances.

**TABLE 2
DEBT MANAGEMENT**

Category	Amount Collected	Balance Owed
Civil Penalties	\$316,400	\$34,924,058
AML Fees	2,174,080	30,080,839
AML Audited Fees	2,949,679	22,685,084
Totals	\$5,440,159	\$87,689,981
Debt Not Delinquent		9,695,129
Total Delinquent		\$77,994,852

NET WORTH REPORTS

OSM uses private contractors to determine the net worth of individuals and businesses with unpaid SMCRA obligations. Net worth reports are requested to determine the ability of businesses and individuals to pay for the cost of reclaiming old mining sites or to pay their delinquent obligations, or both. During 1993, OSM requested net worth reports on 439 companies and individuals at a cost of approximately \$120,254.

LEGAL ACTION AGAINST DEBTORS

OSM is currently processing \$5.7 million of delinquent debt. When OSM exhausts its own avenues of debt collection, delinquent debts are referred to the Department of the Interior's Solicitor for appropriate legal action or bankruptcy proceedings. Of the total debt owed at the end of 1993, \$72.3 million has been referred to the Interior Department Solicitor. Of this amount, \$20.8 million is in bankruptcy proceedings and the remainder has been referred for collection action.

FEE COMPLIANCE AUDIT

OSM maintains regional and area audit offices in 13 cities throughout the nation's coal-producing regions. The audit program has assumed an expanding role in the overall enforcement of SMCRA. While maintaining the basic audit program necessary to assure compliance with reclamation fee requirements, the auditors have also (1) performed special financial reviews, (2) expanded their scope of work to encompass ownership and control data for the Applicant/Violator System, and (3) assisted the Office of the Solicitor, field office directors, and state regulatory authorities in specific enforcement efforts.

In 1993, OSM conducted 397 audits and audit-related projects and identified \$7.3 million in under-reported or

non-reported AML fees. In addition to effecting structured audits of coal operators, OSM's audit staff has developed technical and programmatic policy; developed and implemented audit procedures and standards; developed and tested a Quality Assurance Review Program; developed an automated audit prioritization system; developed and implemented an Audit Appeals Program; and researched and coordinated the development of rules and regulations that affect the fee compliance program.

FINANCIAL MANAGEMENT INVESTMENTS

Pursuant to the authority granted by Congress in 1990 (Public Law 101-233), OSM began investing AML funds in 1992. By law, OSM is restricted to investing in certain market-based* securities issued by the U.S. Treasury, such as bills, notes, bonds, and one-day certificates.

Total investment earnings received for 1993 were \$30.6 million. An additional \$1.1 million was earned in 1993 but will not be received until 1994. The average interest earned on investments during the year was 2.92 percent. At the end of the fiscal year, OSM had more than \$1.09 billion invested in Treasury securities.

The passage of the Energy Policy Act of 1992 (Public Law 102-486) stipulated that all 1993 investment earnings received and all future investment earnings are to be made available for transfer from the AML fund to the Combined Fund (for retired miners), beginning in 1996.

AUDITED FINANCIAL STATEMENTS

Since 1990, OSM has prepared an Annual Financial Statement after the close of each year, as required by the Chief Financial Officers Act of 1990 (Public Law 101-576). OSM's Annual Financial Statements are audited by the Inspector General to assure that the financial results are fairly stated and conform with generally accepted accounting principles for federal agencies. Results of the most recently completed audit, covering 1991, were very favorable. OSM received an unqualified or "clean" opinion from the Inspector General (OIG Report No. 93-1-333, December 1992). Preparation of OSM's financial statements for 1993 began with the close of the year on September 30, 1992. The Inspector General's audit staff is currently reviewing OSM's financial statements for both 1992 and 1993.

*"Market-based" is an investment program that simulates the marketplace without the market impact.

ELECTRONIC IMPROVEMENTS IN FINANCIAL MANAGEMENT

OSM continues to apply current technology to enhance its financial management functions. OSM has implemented automated procurement and budgeting systems that are fully integrated with the accounting system. Those systems provide all OSM offices with on-line access to accurate, up-to-the minute financial management information.

OSM has also implemented an automated travel voucher program that enables the use of statistical sampling to audit travel vouchers. OSM employees continue to receive their paychecks and travel reimbursements through the Direct Deposit/Electronic Funds Transfer program. Additional initiatives are underway to further automate the collection and disbursement of funds by OSM.

The Abandoned Mine Land Fee Collection System (AMLFCS) was revised to match the state regulatory authorities' process for issuing coal mining permits. When a state regulatory authority adds a new permit to the Applicant Violator System, the new permit is automatically added to the AMLFCS data base. That process has resulted in a more accurate inventory of active coal operators for use throughout OSM.

OSM is also collecting additional Abandoned Mine Land fee collection data as required by Section 402(c) of Public Law 102-486. The additional data now being collected includes (a) the owner of the coal, (b) the preparation plant, tippie, or loading point for the coal, and (c) the purchasers of the coal.

INFORMATION MANAGEMENT PLAN

Progress on the information resource management modernization plan continued in 1993 through infrastructure improvements that support the agency-wide objectives of increased accuracy, credibility, and timeliness of mission support information, hand-in-hand with cost containment of those automated information delivery processes.

Several significant accomplishments during the fiscal year brought OSM closer to completing its strategic blueprint. These include: redesigning the Applicant Violator System to operate more cost-effectively; procuring additional microcomputers to upgrade local area network client-servers, expand several field office local area networks, and eliminate all obsolete workstations; progress in installing a wide area data network to allow modern, efficient access by agency and cooperating state offices nationwide; procuring new workstations for states using OSM's Technical Information Processing System; completing the state-level Abandoned Mine Land Inventory

System designed for field-level distribution and processing; and implementing improved network-based information safeguards to protect and secure critical operational information.

TECHNICAL INFORMATION PROCESSING SYSTEM (TIPS)

The Technical Information Processing System (TIPS) is a national computer system designed by OSM in close cooperation with the states. It is operated by OSM for use by state regulatory authorities, as well as OSM, in carrying out technical regulatory responsibilities under SMCRA. TIPS consists of a centrally located super minicomputer at the TIPS National Computer Center in Denver networked with engineering/scientific workstations in state and selected federal offices for assisting technical decision-making associated with conducting reviews of permits, performing cumulative hydrologic impact assessment, quantifying potential effects of coal mining, quantifying revegetation success, assisting in the design of abandoned mine land reclamation projects, and preparing environmental assessments and environmental impact statements. Using off-the-shelf commercial software, TIPS was designed to perform a number of automated operations that, in the past, were done manually.

TIPS has been fully operational since 1989 and is used extensively by states and OSM offices. In 1993, OSM proceeded with the planning and procurement needed to replace the engineering/scientific workstations and implement a high-speed wide area network (a replacement for GeoNET) to interconnect workstations with the TIPS minicomputer. In-depth training in the use of TIPS software continued in 1993. In addition, OSM provided technical assistance using TIPS on specific projects, including:

- Analysis, geologic/hydrologic modeling, and volumetric calculation of a bond forfeiture site;
- Litigation support related to quantifying approximate original contour; and
- Assistance, through a cooperative agreement with EPA, in geologic modeling of a proposed Superfund site.

APPLICANT/VIOLATOR SYSTEM

Section 510(c) of SMCRA and corresponding regulations (30 CFR 773) prohibit the issuance of permits to applicants with previous uncorrected violations and to applicants related to violators through ownership and control. The Applicant/Violator System (AVS), a computer data base, was developed to assist OSM and the state regulatory authorities assure compliance with those require-

ments. AVS identifies associations between permit applicants or their affiliates and uncorrected violations of SMCRA. OSM and the states use the information to help determine whether a permit should be issued or denied.

Since 1991, in order to avoid AVS permit "deny" recommendations, companies paid over \$4,493,585 in AML fees and federal civil penalties which would not have been paid otherwise. Some companies also signed settlement agreements to resolve uncorrected violations by performing reclamation work and providing lists of their contract operators.

In working to improve the usefulness of the system, OSM implemented a number of specific improvements to AVS, including the following:

- Produced reports for the identification of possible Improvidently Issued Permits;
- Installed a process whereby entities tied to a settlement agreement are not considered part of violations or the Violation Family Tree during the evaluation process;
- Allowed *READ ONLY* user access to OSM1/402c data; and
- Provided OSM field office access to multiple state information.

A proposed new rule on "permit information" requirements was published in the *Federal Register* on June 28, 1993. The purpose of the proposed rule is to clarify the role of AVS in the permit application process; reorganize and amend the definitions of ownership and control; amend the definition of and procedures for transfer, assignment, or sale of permit rights; establish procedures for permit revisions regarding changes in operators or other changes in ownership or control; revise requirements for information to be submitted as part of the permit application process; eliminate certain civil penalties for owners and controllers of violators; and establish penalties for knowing submission of false or incomplete ownership or control information during any of the above or several other information collection processes.

The proposed regulations would amend the definition of "transfer, assignment or sale of permit rights." They would also amend the procedures for "transfer, assignment or sale of permit rights." The proposal would recognize and amend the definitions of "owned or controlled" in 30 CFR 773.5 to distinguish between ownership and control of entities and ownership and control of surface coal mining operations. It would allow applicants for surface coal mining permits to avoid submitting duplicative information by certifying that the information relat-

ing to them that is contained on AVS is correct and current. In conjunction with that revision, the proposal provides for necessary updates of information in AVS to be maintained through the permit revision and transfer, assignment, and sale processes. Consistent with this, the requirement to update ownership and control information within 30 days of receiving a cessation order would be eliminated. Information requirements for certain categories of ownership and control would be removed from the permit information regulations. Penalties would be imposed for knowing failure to provide complete and accurate ownership or control information.

AVS is being used effectively to assure that individuals and companies associated with outstanding SMCRA violations, or with outstanding penalties or fees, are not being issued new permits. Since 1990, over 22,474 applications have been reviewed by AVS; 13,907 applications received a recommendation of "issue," 4,434 applications received a recommendation of "deny," and 1,723 applications received a recommendation of "conditional."

An OSM decision to overturn system recommendations results from court orders, recent fee payments, and settlement agreements not yet incorporated into the system to resolve outstanding violations. The current increase in activity in the settlement of outstanding violations has caused a higher rate of overturns. However, since 1992, the AVS permit application recommendation reliability rating has maintained an average of 90.35 percent. Additionally, AVS continues to experience a significant increase in use, especially by all OSM field offices, fee audit offices, Solicitor offices, the Tennessee Valley Authority (TVA), state regulatory authorities, and the U.S. Department of Labor's Mine Safety and Health Administration.

MONITORING POTENTIAL CONFLICTS OF INTERESTS

Sections 201(f) and 517(g) of SMCRA prohibit any federal or state employee "performing any function or duty under this Act" from having "direct or indirect financial interest in underground or surface coal mining operations." In monitoring compliance with those provisions, OSM provides oral and written guidance and assistance to personnel of affected state and federal agencies, including OSM's own employees. Through this process, OSM has increased awareness and understanding of those provisions, and violations have steadily decreased. In 1993, 1,063 employees filed financial disclosure statements. No violations were reported.

As part of OSM oversight, State Ethics Program reviews were conducted in June 1993 and September 1993 on the Virginia, Illinois, and Ohio programs. The reviews ana-

lyzed the financial disclosure statements on file and evaluated the procedural processes in place for the programs. No major problems were identified. OSM has now completed 11 in-depth reviews in 24 of the states where primacy has been granted under SMCRA.

EQUAL OPPORTUNITY COMPLAINT PROCESSING COSTS

In 1993, complaint processing costs continued to decrease as a result of internal investigations, internally prepared complaint analyses, and increased emphasis on Alternative Dispute Resolution (ADR).

It is expected, however, that in 1994 processing costs will increase as a result of implementing new EEOC regulations (29 CFR 1614).

During 1994 OSM will formally implement its ADR program, which should help to further decrease complaint processing costs.

OSM WORK FORCE PROFILE

1993 ended with 22 fewer full-time permanent employees than when the year began (down from 1025 to 1003). Headquarters showed a decrease of seven (7) while the Western Support Center showed an increase of two (2). The Field Offices decreased by fifteen (15) and the Eastern Support Center by two (2). OSM's trend toward staff reduction is a result of "right-sizing" to support current work assignments within budget constraints.

CAREER DEVELOPMENT RESOURCES OFFICE

The Career Development Resources Office (CDRO), established during the latter part of 1992, is fulfilling its purpose by providing self-instructional and motivational material to both Headquarters and field personnel. No-cost training was provided to OSM employees by co-sponsoring training with other OSM program offices and by using in-house trainers.

During 1993, OSM managers and supervisors were surveyed to identify their interest in human resources courses. Survey results showed that six out of twelve suggested topics generated a high level of interest from OSM employees. They included Employees' Rights and Responsibilities; Position Management; EEO Training for Employees; How to Prepare Performance Standards; and Retirement Planning. EEO training was offered to all OSM employees during 1993. Workshops on preparing performance standards and retirement planning were offered to Headquarters personnel, to the Western Support Center, and to other installations in the West. Workshops on employee rights and responsibilities and position management will be implemented in 1994.

A self-paced training program was developed and made available to OSM employees to help prepare them for job interviews. The self-paced training program focuses on interviewing skills through role playing and use of video tapes.

In addition, OSM employees are developing a training course on Presentation techniques. The development of this training course is in its final stages.

OFFICE OF THE INSPECTOR GENERAL AND GENERAL ACCOUNTING OFFICE AUDITS

During 1993, the Office of the Inspector General initiated three audits and issued four audit reports, of which three were follow-up investigations that had no additional recommendations. OSM completed implementation actions on two audits and referred three audits to the Interior Department for management decisions. The General Accounting Office (GAO) did not initiate any new audits. OSM implemented corrective action on one GAO audit; and two remain active pending implementation actions. Table 3 lists those audits and their status.

TABLE 3
1993 OIG and GAO REVIEWS

Audit or Review Title	Audit Number	Status
<i>OFFICE OF THE INSPECTOR GENERAL (OIG)</i>		
Fee Compliance Program, Office of Surface Mining Reclamation and Enforcement	90-99	Complete
Final Audit Report on the Regulatory Program	91-I-655	Complete
Follow-up of Recommendations Concerning Fee Compliance Program, Office of Surface Mining Reclamation and Enforcement	93-I-189	Complete (No Findings)
Office of Surface Mining Reclamation and Enforcement Combined Financial Statements for Fiscal Years 1990 and 1991	93-I-333	Complete (No Findings)
Follow-up of Personal Property Management, OSMRE	93-I-1157	Complete (No Findings)
Coal Reclamation, Mine Land Reclamation, AML Reclamation Program	91-I-1295	Referred for Management Decision
Non-Coal Reclamation, AML Reclamation Program	91-I-1248	Referred for Management Decision
Final Reports on Fiscal Year 1990 Financial Statements, Regulatory Program Performance and Management Letter Resulting from Audit of Fiscal Year 1990 Financial Statements	91-I-1273	Referred for Management Decision
Selected Grant Oversight Activities, OSM	93-I-1198	Active
Regulatory Program Enforcement Techniques		Audit Work in Process
OSM Technical Statements for Fiscal Years 1992 and 1993		Audit Work in Process
<i>GENERAL ACCOUNTING OFFICE (GAO)</i>		
Coal Mine Subsidence: Several States May Not Meet Federal Insurance Program Objectives	GAO/RCED 91-140	Complete
Abandoned Mine Reclamation: Interior May Have Approved State Shifts to Non-coal Projects Prematurely	GAO/RCED 91-162	Active
Surface Mining Operation of the Applicant Violator System Can Be Improved	GAO/AFMD 89-31	Active

FIGURE 1 OSM ORGANIZATION

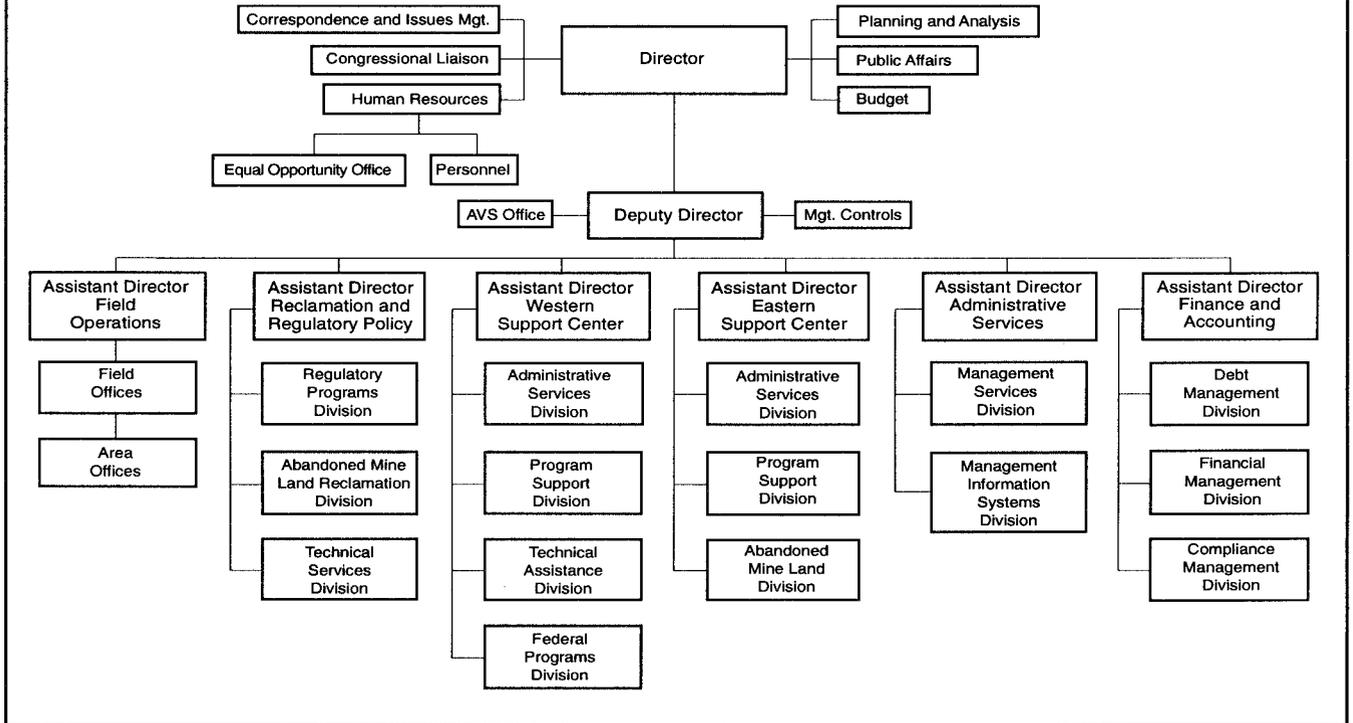
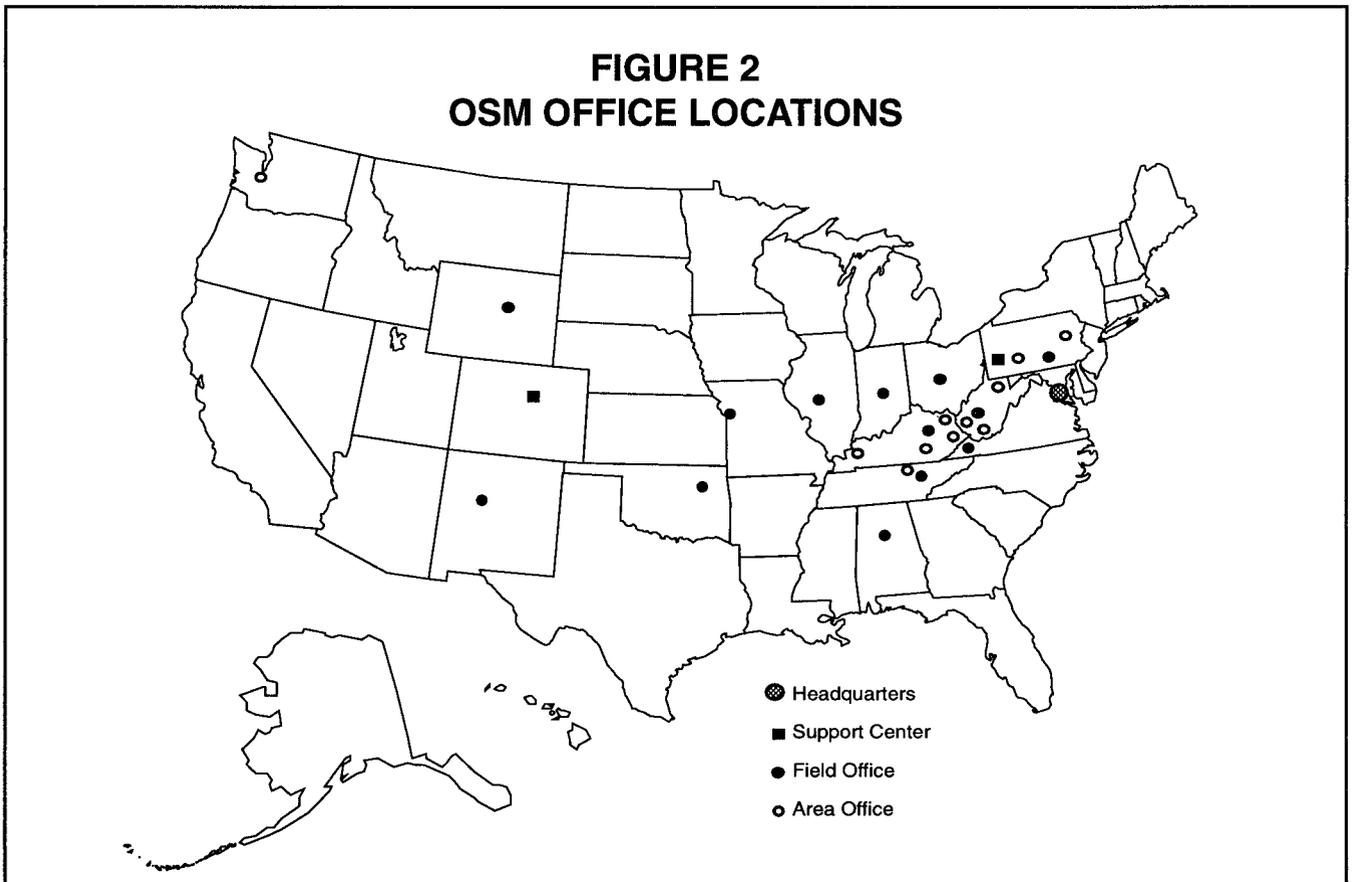
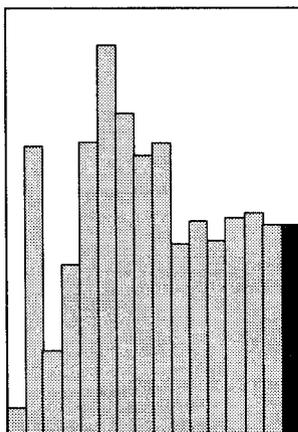


FIGURE 2 OSM OFFICE LOCATIONS



4. REGULATORY ENFORCEMENT

REGULATORY DEVELOPMENT



Final Rulemaking Actions
1978-93

SMCRA charges OSM with responsibility for publishing rules and regulations necessary to carry out the purposes of the Act. OSM's permanent regulatory program and related rules provide the fundamental mechanism for assuring that the goals of SMCRA are achieved. One of OSM's major objectives is to establish a stable regulatory program by improving the regulatory development process and obtaining a broad spectrum of viewpoints on rulemaking activities.

The 1993 rulemaking process included discussions with representatives of the coal industry, environmental groups, and state regulatory authorities to obtain their input and suggestions. During Fiscal Year 1993, OSM published eight proposed permanent program rules in the *Federal Register*: Abandoned Sites on December 18, 1992; Coal Weight Determination on December 29, 1992; Land Use Information on January 8, 1993; Regulation of Indian Lands on March 22, 1993; AVS Permit Information on June 28, 1993; Wire Transfer on August 30, 1993; Alternative Bonding Systems on September 9, 1993; and Subsidence on September 24, 1993. Also, two final permanent program rules were published during 1993. Table 4 describes final regulations published in the *Federal Register* during 1993. Each regulation is identified

with the *Federal Register* citation that gives the volume and page number, effective date, Code of Federal Regulations (CFR) number, and date of publication.

SIGNIFICANT COURT DECISIONS

During 1993, the federal courts rendered a number of significant decisions relating to SMCRA. Those cases are described in Table 5.

STATE PROGRAM AMENDMENTS

The federal regulations governing permanent regulatory programs were initially promulgated in 1979. The regulations were completely revised in 1981-83 to allow states and operators greater flexibility in how they achieve compliance with SMCRA. In response to extensive litigation and agency policy, these rules were further revised beginning in 1985 and continuing to the present. In 1993 OSM published 90 proposed and 58 final state program amendments in the *Federal Register*.

States have the right to propose to amend their programs at any time for appropriate reasons. In addition, whenever SMCRA or its implementing regulations are revised, OSM is required to notify the states of the changes needed to assure that state programs remain no less effective than the federal requirements. This is known as a "Part 732 notification."

The result has been the submission of a large number of complex amendments from the states. OSM has taken several steps to process those submissions more efficiently. For example, the amendment review process within OSM has been decentralized, and format and

**TABLE 4
FINAL RULES PUBLISHED DURING 1993**

Previously Mined Area

58 FR 3466

2/8/93

(30 CFR Parts 701 and 785)

Published 1/8/93

This rule amends OSM program regulations by revising the definition of "previously mined area" and by clarifying the requirements governing off-site coal preparation plants.

Removal of Parts 718 and 720

58 FR 41936

9/7/93

(30 CFR Parts 718, 720, and 735)

Published 8/5/93

This rule amends OSM regulations by removing regulations on the adoption of state standards and state enforcement activities from the initial regulatory program for being redundant or unnecessary.

content guidelines for state program amendment submissions have been issued to the states. Also, steps have been taken to assure that states' schedules for rulemaking in response to Part 732 notification are reasonable to accomplish timely state program revisions.

In 1993 OSM worked toward eliminating backlogged amendments and continued to shorten the review time for state program amendments. In 1993 the average processing time was 157 days, and at the end of the period only seven pending amendments were older than six months.

STATE REGULATORY PROGRAMS

Since May 3, 1978, all surface coal mines have been required to have permits and to comply with either OSM regulations or approved state program provisions. Currently there are 24 primacy states that administer and enforce programs for regulating surface coal mining and reclamation under SMCRA. In addition, during 1993, three states had federal programs where OSM regulated surface coal mining and reclamation. Table 6 summarizes state program statistics for the period from July 1, 1992, through June 30, 1993. (OSM's annual statistics on state and federal regulatory programs are compiled on a July-June cycle.)

TABLE 5 1993 SIGNIFICANT COURT DECISIONS

APPLICANT/VIOLATOR SYSTEM (AVS) ISSUES

SOCM v. Babbitt, No. 81-2134 (D.D.C.) (on remand from the D.C. Circuit)

In February 1993, the Supreme Court denied SOCM's petition for certiorari of the court of appeals' May 1992 decision that the district court lacked jurisdiction to approve the parties' January 1990 settlement agreement. In July, the district court dismissed the case without prejudice. On September 28, 1993, the Secretary informed the House and Senate Appropriations Committees that OSM would not enter into a new agreement with SOCM concerning implementation of the AVS, but would instead continue to make improvements to the permit review process through rulemaking, internal directives, memorandums of understanding, etc.

RULE CHALLENGES

National Wildlife Fed'n v. Babbitt, No. 91-2275 (D.D.C.) (subsidence)

Plaintiffs challenged OSM's Federal Register Notice of Inquiry (NOI) which stated that the mining prohibitions contained in Section 522(e) of SMCRA did not apply to subsidence. On September 22, the court vacated the NOI and remanded the case to the Secretary for notice-and-comment rulemaking. The court found that the environmental plaintiffs had standing and that the NOI was a legislative rule subject to the APA notice and comment requirement.

Indiana Coal Council, Inc. v. Babbitt, Nos. 91-5397, etc. (D.C. Cir.) (consolidated) (historic properties)

In October 1992, the President signed the Reclamation Projects Authorization and Adjustments Act which amended the definition of "undertaking" in the National Historic Preservation Act to include state programs administered pursuant to delegation or approval by a federal agency. The Reclamation Projects Act mooted the Government's appeal of a district court decision in favor of environmental plaintiffs. Accordingly, in April 1993, the court of appeals granted the Government's motion to dismiss its appeal. The industry's appeal has been set for briefing.

National Coal Ass'n v. Lujan, No. 91-5328 (D.C. Cir.) (individual civil penalties)

The industry challenged OSM's 1988 regulations providing for the assessment of civil penalties against individual officers, directors, or agents of mine operators. On December 1, 1992, the court of appeal upheld the regulations, ruling that OSM is not required to provide an assessment conference or use a point system in determining the penalty amount for individual civil penalties.

VALID EXISTING RIGHTS (VER)

Belville Mining Co. v. United States, Nos. 91-3623, etc. (6th Cir.) (consolidated)

On July 26, 1993, the court of appeals held that both SMCRA and the Secretary's regulations authorize the Secretary to review and vacate erroneous determinations of VER. Plaintiffs challenged OSM's reversal of a determination that plaintiffs had VER to surface mine a tract in the Wayne National Forest in Ohio.

ATTORNEY'S FEES

SOCM v. Babbitt, No. 81-2134 (D.D.C.) (on remand from the D.C. Circuit)

In October 1992, the court of appeals vacated and remanded the district court's 1991 order awarding SOCM \$823,686 in attorneys' fees for work performed in the case from 1985 to 1990. If no settlement is reached, the district court is expected to set a briefing schedule on the issue of whether plaintiffs are eligible for a fee award notwithstanding the court of appeals' May 1992 ruling on jurisdiction.

**TABLE 6
STATE PROGRAM STATISTICS
1993 (July 1, 1992 - June 30, 1993)**

Alabama Alaska Arkansas Colorado Illinois Indiana Iowa Kansas Kentucky Louisiana Maryland Missouri

State Staffing (FTE's 6/30/93)	Alabama	Alaska	Arkansas	Colorado	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maryland	Missouri
Regulatory Program	35	3.95	8	26	67	66	5.65	4.20	528	4	16	14.3
AML Program	25	3.05	5	13	36	24	5.15	11	55	.4	3	11.4
Permits												
New Permits Issued	19	1	1	0	10	13	1	1	141	0	2	1
Inspections												
Inspectable Units (6/30/93)	309	5	34	59	109	478	28	22	3,808	2	102	83
Complete Inspections	3,989	17	138	244	447	1,528	112	88	16,308	8	535	272
Partial Inspections	776	32	274	450	989	2,362	224	176	18,443	16	947	643
Citations Issued												
Notices of Violations (Actions)	330	5	5	129	58	268	38	8	1,509	2	78	48
Failure-to-Abate Cessation Orders	43	0	0	4	1	9	1	7	263	0	21	1
Imminent Harm Cessation Orders	12	0	0	1	0	1	0	0	12	1	0	0
Bonds												
Forfeitures	7	0	0	0	0	0	0	0	32	0	4	1
Abandoned Mine Lands												
Acreage Reclaimed	109.9	2	424	319.4	763.3	0	66.9	.7	311.3	0	47.5	12

TABLE 6 Continued
STATE PROGRAM STATISTICS
1993 (July 1, 1992 - June 30, 1993)

Montana New Mexico North Dakota Ohio Oklahoma Pennsylvania Texas Utah Virginia West Virginia Wyoming

State Staffing (FTE's 6/30/93)

Regulatory Program 20.9 13.75 10 72 39 307 58 23.5 95 259 35.58

AML Program 8 11.5 5.8 33 12 131 14 7 18 58 13.5

Permits

New Permits Issued 1 0 0 82 7 110 2 1 37 141 0

Inspections

Inspectable Units (6/30/93) 21 16 46 858 138 2,930 21 32 923 3,354 40

Complete Inspections 99 64 193 3,131 526 12,039 92 130 3,994 9,926 195

Partial Inspections 122 143 779 4,755 885 19,846 367 240 4,205 16,735 311

Citations Issued

Notices of Violations (Actions) 12 14 4 458 90 1,999 39 73 335 2,851 19

Failure-to-Abate Cessation Orders 1 0 0 67 21 138 0 4 37 383 0

Imminent Harm Cessation Orders 1 0 0 12 3 0 0 1 16 41 0

Bonds

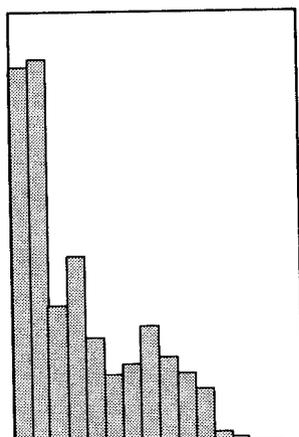
Forfeitures 0 0 0 14 4 19 0 0 12 91 0

Abandoned Mine Lands

Acreage Reclaimed 4.8 0 5 164 317 833.1 152 30.7 60.7 409 1,598

GRANTS TO STATES

PROGRAM DEVELOPMENT GRANTS



Program Development Grants 1978-93

Section 201 of SMCRA authorizes OSM to assist state regulatory authorities in developing or revising surface mining regulatory programs. In 1993 no program development grants were awarded.

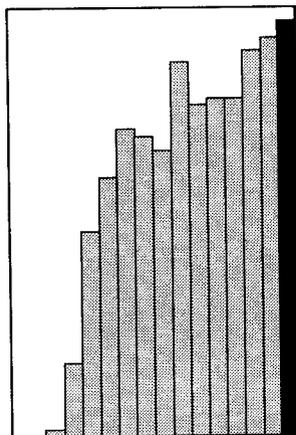
Although OSM encourages and supports state primacy in the regulation of surface coal mining and reclamation operations, certain states with coal reserves have elected not to submit or maintain regulatory programs. Thus, those states are federal program states, with surface coal mining and reclamation operations regulated by OSM. Full federal programs are in effect in eleven states: California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, and Washington. Of the federal program states, only California, Tennessee, and Washington have active coal mining. Table 8 summarizes OSM's regulatory actions in those three states during 1993.

FEDERAL OVERSIGHT OF STATE REGULATORY PROGRAMS

SMCRA Section 517(a) provides that OSM shall make such inspections as are necessary to evaluate the administration of approved state programs. In meeting that requirement, OSM reviews permits, conducts oversight inspections of mine sites, and undertakes oversight review on topics of concern in the 24 states with approved primacy programs. Oversight inspections are conducted on a random-sample basis and in response to citizen complaints. If OSM has reason to believe a violation of a state program exists, OSM must notify the state (except in the case of imminent danger to the public or the environment, in which case OSM must immediately inspect the site and issue a Cessation Order if the state has not taken appropriate action). OSM notifies the state of a possible violation by issuing a "Ten-Day Notice." Once notified of a possible violation, the state then has 10 days in which to take appropriate action to cause the violation to be corrected, or to show good cause for not doing so. In the relatively few instances where OSM determines that a state has not taken appropriate action or has not shown good cause, a federal inspection is conducted, and, if a violation is found, a federal Notice of Violation or Cessation Order is issued.

Since 1989, changes have been implemented in the manner in which OSM conducts oversight of state programs. Those changes include revised requirements for the field office director's report on each state program, an emphasis on oversight tailored to specific activity areas under each state program (based on perceived need or to follow up on prior problems), and the use of action plans developed jointly between field office directors and states to resolve problems when they occur. Field offices are also required to assure that data needed to assess state program in monitoring on-the-ground conditions are collected and evaluated. Table 9 summarizes OSM's oversight inspection and enforcement activities during 1993.

REGULATORY GRANTS



Permanent Program Regulatory Grants 1978-93

Section 705 of SMCRA authorizes OSM to provide grants to states with approved regulatory programs in amounts not exceeding 50 percent of annual state program costs.

In addition, when a state elects to administer an approved program on federal lands through a cooperative agreement with OSM, the state becomes eligible for financial assistance of up to 100 percent of the amount the federal government would have expended to regulate coal mining on those lands. Table 7 shows grant amounts provided to states during 1993 to administer and enforce regulatory programs.

Table 7 shows grant amounts provided to states during 1993 to administer and enforce regulatory programs.

FEDERAL PROGRAMS FOR STATES

Section 504(a) of SMCRA requires OSM to regulate surface coal mining and reclamation activities on non-federal and non-Indian lands in the state if:

- the state's proposal for a permanent program is not approved by the Secretary of the Interior;
- the state does not submit its own permanent regulatory program; or
- the state does not implement, enforce, or maintain its approved state program.

**TABLE 7
REGULATORY GRANT FUNDING
1993 OBLIGATIONS**

State	Federal Funding*	Cumulative Through 1993*
Alabama	\$991,937	\$6,345,581
Alaska	194,321	1,615,223
Arkansas	164,803	763,453
Colorado	1,270,802	7,147,362
Illinois	2,429,472	17,173,374
Indiana	1,611,393	10,808,610
Iowa	155,644	894,903
Kansas	103,337	889,491
Kentucky	13,043,352	86,729,173
Louisiana	201,347	1,089,652
Maryland	479,589	2,972,346
Mississippi	75,565	303,441
Missouri	427,979	2,749,877
Montana	850,037	5,313,028
New Mexico	735,625	3,661,645
North Dakota	517,329	3,151,443
Ohio	2,964,699	19,571,475
Oklahoma	930,782	5,830,892
Pennsylvania	10,087,400	68,786,215
Tennessee	0	(153,926)
Texas	1,140,988	6,032,561
Utah	1,468,025	8,667,754
Virginia	2,947,672	20,650,549
West Virginia	6,919,241	27,110,954
Wyoming	1,871,672	9,196,914
Crow Tribe	0	64,680
Hopi Tribe	0	298,926
Navajo Tribe	0	787,358
Total	\$51,583,011	\$318,452,954

* Included obligation for AVS, TIPS, Kentucky Settlement, and other Title V cooperative agreements. Figures do not include downward adjustments of prior-year awards. However, cumulative figures are net of all prior-year downward adjustments.

Errata

TABLE 7 REGULATORY GRANT FUNDING 1993 OBLIGATIONS

State	Federal Funding*	Cumulative Through 1993*
Alabama	\$991,937	\$16,462,417
Alaska	194,321	4,082,318
Arkansas	164,803	2,074,100
Colorado	1,270,802	12,941,557
Illinois	2,429,472	31,245,214
Indiana	1,611,393	16,673,317
Iowa	155,644	1,443,508
Kansas	103,337	1,925,671
Kentucky	13,043,352	147,017,295
Louisiana	201,347	2,013,698
Maryland	479,589	6,999,719
Michigan	0	135,458
Mississippi	75,565	432,512
Missouri	427,979	4,651,727
Montana	850,037	8,692,986
New Mexico	735,625	6,912,132
North Dakota	517,329	6,919,973
Ohio	2,964,699	41,766,563
Oklahoma	930,782	9,423,537
Pennsylvania	10,087,400	114,910,475
Rhode Island	0	158,453
Tennessee	0	5,340,085
Texas	1,140,988	9,593,045
Utah	1,468,025	14,031,455
Virginia	2,947,672	37,675,884
Washington	0	4,893
West Virginia	6,919,241	48,914,257
Wyoming	1,871,672	17,736,387
Crow Tribe	0	732,759
Hopi Tribe	0	885,611
Navajo Tribe	0	2,140,461
Total	\$51,583,011	\$573,937,467

* Included obligation for AVS, TIPS, Kentucky Settlement, and other Title V cooperative agreements. Figures do not include downward adjustments of prior-year awards. However, cumulative figures are net of all prior-year downward adjustments.

REGULATION OF SURFACE MINING ON FEDERAL AND INDIAN LANDS

FEDERAL LANDS PROGRAMS

Section 523(a) of SMCRA requires the Secretary of the Interior to establish and implement a federal regulatory program applicable to all surface coal mining and reclamation operations taking place on federal lands. OSM promulgated the current federal lands program on February 16, 1983.

The federal lands program is important because the federal government owns significant coal reserves, primarily in the West. The development of federal coal reserves is governed by the Federal Coal Management Program of the U.S. Department of the Interior's Bureau of Land Management. Of the 234 billion tons of identified coal reserves in the western U.S., 60 percent is federally owned.

Through cooperative agreements, the administration of most surface coal mining requirements for the federal lands program may be delegated by the Secretary of the Interior to states with approved regulatory programs. By the end of 1993, the Secretary had entered into such cooperative agreements with Alabama, Colorado, Illinois,

Montana, New Mexico, North Dakota, Ohio, Oklahoma, Utah, Virginia, West Virginia, and Wyoming.

Under SMCRA, once the Secretary and the state have signed a cooperative agreement, the state regulatory authority assumes permitting, inspection, and enforcement responsibilities for surface coal mining activities on federal lands in that state. OSM maintains an oversight function to assure that the regulatory authority fully exercises its delegated responsibility under the cooperative agreement. In states without cooperative agreements, the required permitting, inspection, and enforcement activities under SMCRA are carried out by OSM. During 1993, two new permits were issued by OSM on federal lands in Kentucky.

For all states with leased federal coal, OSM prepares Mining Plan Decision Documents required by the Mineral Leasing Act, as amended, and documentation for other non-delegable authorities for approval by the Secretary. During 1993, 14 mining plan actions were prepared and approved for coal mines on federal land.

TABLE 8
FEDERAL REGULATORY PROGRAMS
STATE WITH ACTIVE MINING
1993 (July 1, 1992 - June 30, 1993)

	Tennessee	Washington	California
Permits			
Existing and New Permit Applications	35	3	0
New Permits Issued	8	0	0
Permit Revisions and Renewals Issued	159	9	0
Permits Suspended or Revoked	0	0	0
Total Acres Permitted	2,424	14,872	0
Inspections			
Inspectable Units	496	4	4
Complete Inspections	1,921	14	15
Partial Inspections	3,355	24	30
Citations Issued			
Notices of Violations	207	0	2
Failure-to-Abate Cessation Orders	20	0	0
Imminent Harm Cessation Orders	4	0	1
Bonds*			
Final Bonds Released	22	0	1
Forfeitures Initiated	3	0	0
Bonds Collected	6	0	0
Default Sites Reclaimed	2	0	0
Designation of Lands Unsuitable for Mining			
Petitions Received	0	0	0

*Permanent Program Sites only.

INDIAN LANDS PROGRAM

Pursuant to Section 710 of SMCRA, OSM regulates coal mining and reclamation on Indian lands. In the Southwest, three mines on the Navajo and Hopi reservations and a portion of a coal haul road on the Ute Mountain Ute reservation are permitted under the permanent Indian Lands Program, and one mine is operating under an interim permit. In addition, OSM, in cooperation with the Bureau of Indian Affairs (BIA) and the Navajo Nation, is overseeing the final reclamation of three mines on the Navajo reservation regulated under the interim program.

On the Crow Ceded Area in Montana, OSM and the Montana Department of State Lands continue to administer applicable surface mining requirements pursuant to a Memorandum of Understanding that includes both

permitting and inspection functions. Table 10 provides statistics on regulatory activities on Indian lands during 1993.

HEARINGS AND APPEALS

SMCRA requires the Secretary of the Interior to provide administrative review of OSM actions, including the opportunity for hearings governed by the Administrative Procedure Act. The Secretary has delegated this administrative review function to the Department's Office of Hearings and Appeals (OHA), which is not part of OSM but which handles the administrative review responsibilities of the Department of the Interior.

OHA consists of a Hearings Division -- staffed by administrative law judges who hold hearings under the Admin-

TABLE 9
FEDERAL OVERSIGHT OF STATE PROGRAMS
1993 (July 1, 1992 - June 30, 1993)

State	Number of OSM Inspections		Violations Cited in OSM Enforcement Actions		
	Random	Other*	NOV's**	FTACO's***	IHCO's****
Alabama	160	32	0	0	0
Alaska	5	3	0	0	0
Arkansas	16	7	0	0	0
Colorado	25	7	2	1	0
Illinois	54	28	0	0	0
Indiana	160	14	1	2	0
Iowa	14	12	0	0	0
Kansas	14	4	1	0	0
Kentucky	430	1,180	50	5	4
Louisiana	2	1	0	0	0
Maryland	56	32	1	1	0
Missouri	58	19	0	0	0
Montana	8	4	0	0	0
New Mexico	7	0	0	0	0
North Dakota	10	5	0	0	0
Ohio	260	40	0	0	1
Oklahoma	59	64	3	1	2
Pennsylvania	348	344	8	7	0
Texas	14	6	1	0	0
Utah	15	3	1	0	0
Virginia	274	195	5	1	0
West Virginia	343	350	28	7	0
Wyoming	17	8	1	0	1

*Excludes exploration sites

** Notices of Violation

*** Failure-To-Abate Cessation Orders

**** Imminent Harm Cessation Orders

istrative Procedure Act -- and several appeals boards established to review appeals arising from decisions of certain program bureaus within the Department of the Interior. The appellate functions of the Secretary under SMCRA have been delegated to the Interior Board of Land Appeals (IBLA). Under SMCRA, a person adversely affected by a written decision of the Director of OSM, or by a delegate of the Director, may appeal directly to IBLA if the decision specifically grants the right to appeal. Administrative review under SMCRA presented the administrative law judges and IBLA with a variety of issues for resolution. In 1993, IBLA issued decisions in nine SMCRA cases.

anthracite region has produced a legacy of abandoned mine land problems. However, because most current mining operations affect previously disturbed land through remining, a large percentage of abandoned mine land is eventually restored to productive use.

The anthracite mining industry produces around 4.9 million net tons per year, approximately 7.0 percent of Pennsylvania's annual coal production. The Pennsylvania anthracite program currently covers 425 inspectable units permitting close to 100,000 acres, and includes 111 underground mines, 16 preparation plants, 7 refuse disposal sites, 128 reprocessing operations, and 163 surface mines. About one-half of anthracite coal production continues to be from the reprocessing of anthracite culm (waste) banks which help fuel eight cogeneration plants. Anthracite operators mined approximately 2.4 million tons from culm banks, 2.1 million from surface mines, and 0.4 million tons from underground mines.

Pennsylvania's Department of Environmental Resources continues to carry out the provisions of the anthracite program successfully. The District Mining Office in Pottsville received a high rating from local citizens for quickly and efficiently responding to mining complaints. At the same time, state inspectors achieved almost 100 percent of their required complete inspections. When major violations occur, they are consistently cited, with over 80 percent of the mines in compliance with performance standards. The permitting staff processed a backlog of over 100 permit renewals and almost all anthracite permits are now permanent program permits. The Pottsville mining office also is developing a program for remining permits to deal with abandoned mine discharges.

PENNSYLVANIA ANTHRACITE REGULATORY PROGRAM

Section 529 of SMCRA provides an exemption from federal performance standards for anthracite coal mining operations, provided the state law governing those operations was in effect on August 3, 1977. Pennsylvania is the only state with an established regulatory program qualifying for the exemption; thus, Pennsylvania regulates anthracite mining independent of SMCRA permanent program standards.

The Pennsylvania anthracite coal region is located in the northeast quarter of the state and covers approximately 3,300 square miles. The more than 20 different coal beds vary in thickness from a few inches to 50 or 60 feet. The anthracite region is characterized by steeply pitching seams, some with dips steeper than 60 degrees. Such strata require highly specialized mining techniques and present unique challenges to assure that highwalls are eliminated and the area is restored to productive post-mining land use. The long history of mining in the

**TABLE 10
REGULATORY ACTIVITIES ON INDIAN LANDS
1993**

Number

Indian Lands in Arizona and New Mexico

Total Permits	5
Total Acres Permitted	84,254
Permitting Actions	70
Inspectable units (All lands)	10
Total Inspections (Partial and Complete)	91
Enforcement Actions (Notices of Violation issued)	0

Indian Lands in Montana

Total Permits	1
Total Acres Permitted	3,225
Permitting Actions	5
Inspectable Units (All lands)	1
Total Inspections (Partial and Complete)	16
Enforcement Actions (Notices of Violation issued)	0

EXCELLENCE IN SURFACE COAL MINING AND RECLAMATION AWARDS PROGRAM

To give well-earned public recognition to the people responsible for the nation's most outstanding achievements in environmentally sound Title V mining and land reclamation, OSM initiated an annual awards program in 1986. The program enables state and federal regulators to recognize America's top-quality coal mine operators who implement SMCRA in an exemplary manner. The winners are operators who have developed innovative reclamation techniques or who have completed mining and reclamation operation that resulted in outstanding on-the-ground performance. The 1992 awards presented June 18, 1993, at the National Coal Association annual meeting were:

THE DIRECTOR'S AWARD

- Each year the Director's Award recognizes outstanding achievement in a special area of reclamation. The 1992 Director's Award was presented to the **R & F Coal Company** for exemplary reclamation resulting in pasture or grazing post-mining land use at its Hart Mine, near Newcomerstown, Ohio.

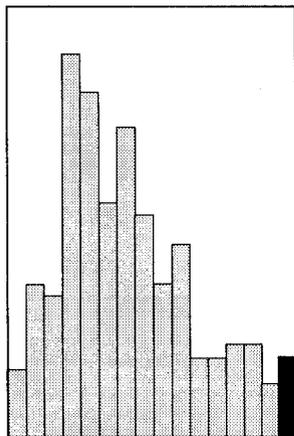
NATIONAL AWARDS

- **Arch of Illinois** for innovative restoration of Pipestone Creek at the Denmark Mine near Percy, Illinois;
- **Bellaire Corporation** for innovative reclamation of "wooded draws" at its Indian Head Mine near Zap, North Dakota;
- **Catenary Coal Company** for exemplary reclamation of pre-existing underground mine refuse at the Maggard's Branch site near Benham, Kentucky;
- **Charolais Coal Corp.** for outstanding reclamation of pre-1977 abandoned mine land at its mine site in Hopkins County, Kentucky;
- **Consolidation Coal** for exemplary reclamation at its Mahoning Valley Mine near Fairpoint, Ohio;
- **Coteau Properties Company** for exemplary reclamation achieved under arid Western conditions at its Freedom Mine near Beulah, North Dakota;
- **Leeco, Inc.**, for innovative design and operation of a preparation plant and refuse disposal area at its operation near Jeff, Kentucky;

- **Lower Colorado River Authority and the Powell Bend Mining Company** for outstanding reclamation by a small mine operator at the Powell Bend Mine near Bastrop, Texas;
- **Mingo Logan Coal Company** for innovative design of a preparation plant at its Black Bear Preparation Plant near Gilbert, West Virginia; and
- **Western Energy Company**, Rose Bud Mine, for innovative reclamation and exemplary preservation of cultural and historic sites in Colstrip, Montana.

5. TECHNICAL ASSISTANCE

RESEARCH



Number of Research Projects Funded 1978-93

OSM conducts research studies to find ways to help mine operators and state and federal regulators do a better job of handling the everyday problems associated with implementing SMCRA. These short-term research studies are directly related to the implementation of Title V regulations affecting active mining operations and provide practical answers to specific problems. In 1993, OSM research funding totaled

\$505,612. Research funds were provided to universities to support existing projects and in amounts sufficient to complete the projects. OSM will be relying on the National Biological Survey and other federal agencies for research results in the future. 1993 research funds were provided in support of the following projects:

- Evaluation of the Biotic Potential of Microorganisms and Higher Plants to Enhance the Quality of Constructed Wetlands;
- Investigation and Assessment of Aquifer Response to Longwall Mining, Illinois;
- Constructed Vertical Flow Aerated Wetlands;
- Optimizing Wetlands Creation on Coal Mined Lands;
- Evaluating the Potential for Created Wetlands Establishment on Restored Surface Mine Sites; and
- Assessment of the Effects of Mining on Geohydrologic and Geotechnical Parameters to Support the U.S./India Initiative.

TECHNOLOGY TRANSFER

OSM published five issues of its reclamation technology newsletter *RecTec* during 1993. *RecTec* provided current information on meetings, papers, and publications covering roads and dust abatement; the impacts of longwall mining on ground water; the use of sewage sludge in mine reclamation; mine reclamation from a global perspective; and the use of fly ash in reclamation.

OSM participates in the Technology Transfer Program sponsored by the National Technical Information Service

(NTIS). To date OSM has transferred 257 technical reports and related abstracts to NTIS for dissemination to the public. One report was transferred to NTIS during 1993 as a result of research completed under Title VII of SMCRA.

Other forms of technology transfer include OSM's sponsorship of the Billings Symposium on mining and reclamation, which is conducted every three years, and direct assistance to state regulatory authorities on an ad hoc basis by OSM's Eastern Support Center in Pittsburgh and Western Support Center in Denver.

EXPERIMENTAL PRACTICES



Experimental Practices Started 1978-93

Section 711 of SMCRA allows alternative mining and reclamation practices that do not comply with sections 515 and 516 performance standards as a way of encouraging advances in mining technology or to allow innovative industrial, commercial, residential, or public post-mining land uses. However, the experimental practices must meet all other standards established by SMCRA and must maintain protection of the environment and the public.

Approval and monitoring of a permit containing an experimental practice results in a close working relationship between the mine operator, the state, and OSM.

In addition to eight ongoing projects in 1993, two new projects were approved, one was completed, and three new experimental practices are under review.

During 1993 the longest ongoing experimental practice was completed. The permit was issued in 1980 to Arch of Illinois, Captain Mine, in Perry County, Illinois. This practice successfully demonstrated that mixing the A, B, and C soil horizons with a bucket wheel excavator can eliminate sodium concentrations which are toxic to plants.

INDIA PROJECT

In 1984, through the United States-India Fund, OSM received the equivalent of \$420,000 from the government of India for mining and reclamation technology transfer. Working directly with the Indian government, OSM planned three research projects and signed contracts to begin the work. The ongoing projects are:

- A conceptual environmental management plan for the Jharia Coal Field, including reclamation of existing unreclaimed lands which have been in operation for approximately 100 years;
- A conceptual environmental management plan for the Singrauli Coal Field. This project will result in the development of contemporaneous reclamation standards for a relatively new coal field; and
- An environmental model for water quality resulting in treatment facilities for improved water quality in the Jharia Coal Field. The U.S. Environmental Protection Agency (EPA) is assisting with this project.

In 1993, data-gathering efforts by Indian scientists continued under these three projects.

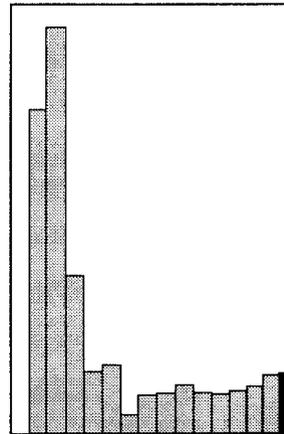
In addition, in 1992 a new project "Reclamation, Revegetation, Land Use Planning and Environmental Protection of Large Scale Continuous Surface Mining in a Complex Ground Water Hydrologic Regime" was approved by the government of India. This project is a collaborative effort between OSM, Pennsylvania State University, Neyveli Lignite Corporation, Ltd., and the Indian government. The three tasks included in the project are mine planning and design; reclamation, revegetation, and environmental protection; and the development of techniques for ground water management. This project will be conducted in two phases. Phase I was underway at the end of 1993.

TECHNICAL TRAINING

During 1993 nationwide training continued for federal, state, and private surface coal mining regulatory and reclamation personnel. The 18 courses offered in 1993 included Acid-Forming Materials Workshop; Administration of Reclamation Projects; Applied Hydrology; Basic Inspection Workbook; Bonding Workshop: Administrative and Legal; Bonding Workshop: Cost-estimating; Enforcement Procedures; Engineering Principles for Program Personnel; Evidence Preparation and Testimony; Historical and Archeological Resources; Instructor Training Course; NEPA Procedures; Principles of Inspection; Soils and Revegetation; Spoil Handling and Disposal Practices; Surface and Ground Water Hydrology; Technical Writing; and Underground Mining Technology.

There were 876 participants in attendance at the 43 training sessions offered during 1993. Participation by state and tribal personnel totaled 71 percent of program attendance, while federal and private attendance decreased to 29 percent in 1993.

SMALL-MINE OPERATOR ASSISTANCE PROGRAM (SOAP)



SOAP Grants 1978-93

Section 401(b)(1) of SMCRFA authorizes up to 10 percent of the fees collected for the Abandoned Mine Reclamation Fund for use in technical assistance to help qualified small mine operators obtain technical data needed for permit applications. Operators who produced fewer than 100,000 tons of coal per year were eligible for assistance in 1991. Effective October 1, 1991, the Abandoned Mine Reclamation Act of 1990 increased from 100,000 to

300,000 the tonnage limit that defined whether operators qualify for assistance.

The Energy Policy Act of 1992 (Public Law 102-486) added a number of enhancements to the technical permitting services provided under SOAP. These include: engineering analyses and designs necessary for the "determination"; cross-section maps and plans; geologic drilling; archaeological and historical information and plans; information and plans required for protection of fish and wildlife habitat and other environmental values; and pre-blast surveys.

Regulations for SOAP place responsibility with the states that have approved permanent programs. In states with federal programs, OSM operates SOAP. In 1993, 119 small mine operators received assistance. This is a slight increase from 115 operators in 1992. Table 11 provides a breakdown of SOAP grant awards by state during 1993.

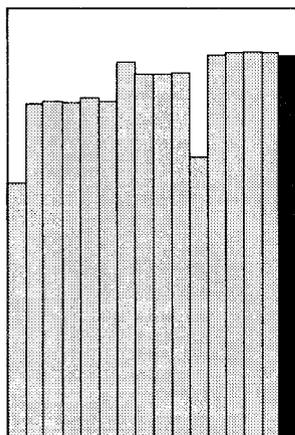
State	Grant Amount
Kentucky	\$500,000
Maryland	50,000
Ohio	264,000
Oklahoma	10,000
Pennsylvania	1,400,000
Virginia	10,000
West Virginia	140,000
Total	\$2,374,000

*Does not include downward adjustments of prior-year awards.

6. ABANDONED MINE LAND PROGRAM

Title IV of SMCRA -- the Abandoned Mine Land Program -- provides for the restoration of lands mined and abandoned or left inadequately restored before August 3, 1977, with priority given to projects that alleviate danger to public health and safety.

AML FUND



AML Fund Collections 1978-93

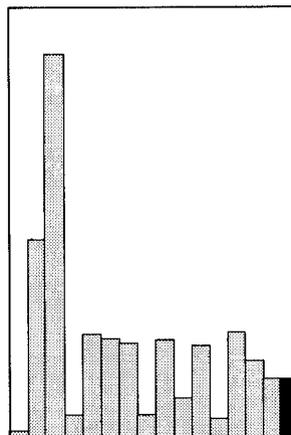
Production fees of 35 cents per ton of surface mined coal, 15 cents per ton of coal mined underground, and 10 cents per ton of lignite are collected from coal producers at all active coal mining operations. The fees are deposited in the Abandoned Mine Reclamation Fund, which is used to pay reclamation costs of AML projects. Collections into the fund consist of reclamation fees, late-payment interest, penalties, and administrative charges. From January 30, 1978, when the first fees were paid, through September 30, 1993, the fund has collected \$3,481,551,816.

Expenditures from the fund are made through the regular budgetary and appropriation process. SMCRA specifies that 50 percent of the reclamation fees collected in each state with an approved reclamation program, or within Indian lands where the tribe has an approved reclamation program, are to be allocated to that state or tribe. That 50 percent is designated as the state or tribal share of the Fund. The remaining 50 percent (the federal share) is used by OSM to complete high-priority and emergency projects under its Federal Reclamation Program; to fund the Rural Abandoned Mine Program (RAMP) administered by the U.S. Department of Agriculture; to fund the Small Operator Assistance Program (SOAP); and to fund reclamation directly through state reclamation programs. In 1991, at the direction of Congress, a formula to distribute federal share money to the state reclamation programs was established based on historic coal production. Table 12 shows fee collections and funding by states for 1993.

The Abandoned Mine Reclamation Act of 1990 (Public Law 101-508) became effective October 1, 1991, and extended fee collection authority through September 30, 1995. The Energy Policy Act of 1992 (Public Law 102-486) further extended the fee collection authority until September 30, 2004. In addition, the Energy Policy Act contained provisions which mandated the following:

- Transfer of interest earned by the AML Fund to the United Mine Workers of America Combined Benefit Fund;
- Deletion of the reclamation priority regarding AML-funded coal research;
- Extension of reclamation eligibility for certain AML water problems created after August 3, 1977;
- Retention of AML eligibility for sites affected by remaining operations; and
- Enhancement of basic SOAP technical services to provide a more complete permitting package.

FEDERAL RECLAMATION PROGRAM



Interior Department Projects 1978-93

Under Sections 402 and 407 of SMCRA, the Secretary of the Interior is authorized to expend Abandoned Mine Reclamation Fund monies for non-emergency reclamation of high-priority AML sites that present an extreme danger to the public. A non-emergency situation is defined in 30 CFR 870.5 as "a condition that could reasonably be expected to cause substantial harm to persons, property, or the environment and to which persons or improvements on real property are currently exposed."

Until states or Indian tribes received approval of their AML programs, all reclamation was carried out as Department of the Interior projects administered by OSM. However, as state programs were approved, beginning in 1980, and as the states assumed responsibility for correcting AML problems, OSM has greatly reduced its direct participation in this portion of the program. During 1993, work was accomplished on 12 projects: two in Georgia, three in Michigan, and seven in Tennessee.

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In 1993 OSM completed its sixth year of oversight of emergency and high-priority projects that were completed at least three years ago. The objective is to identify abatement or control methods that are effective over time, as well as those with demonstrated deficiencies that need to be corrected. The evaluation report

TABLE 12
AML FEE COLLECTIONS AND FUNDING
1993

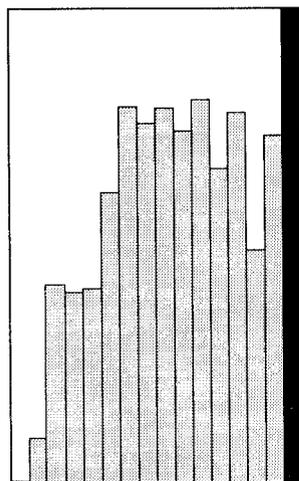
State/ Tribe	Fees Collected	Federal Projects	RAMP Projects	State Share Distribution*	Federal Share Distribution*	Emergency Distribution*
Alabama	\$5,513,618	\$0	\$414,893	\$1,767,182	\$1,211,306	\$300,000
Alaska	541,881	0	0	153,335	1,846,665	25,000
Arkansas	24,101	0	424,985	0	2,000,000	25,000
California	3,245	0	0	0	0	0
Colorado	4,709,061	6,768	0	1,204,472	795,528	0
Georgia	0	135,673	0	0	0	0
Illinois	10,417,805	0	211,780	3,686,844	4,487,462	460,000
Indiana	9,517,465	299,610	145,340	3,052,241	1,460,977	0
Iowa	79,493	5,088	0	15,241	1,984,759	0
Kansas	119,294	0	279,400	78,282	1,921,718	475,000
Kentucky	36,176,437	5,477,754	1,369,627	10,195,176	4,397,997	0
Louisiana	320,065	0	0	84,454	0	0
Maryland	632,976	520,659	171,700	238,803	1,761,197	0
Michigan	0	129,984	0	0	0	0
Missouri	582,568	59,278	0	279,587	1,720,413	0
Montana	12,034,554	0	0	3,376,236	0	125,000
New Mexico	4,755,006	0	0	1,018,994	981,006	0
North Dakota	3,210,645	8,320	150,000	842,381	1,157,619	0
Ohio	7,594,194	345,432	1,046,765	2,406,836	2,750,872	1,915,850
Oklahoma	580,866	9,315	400,000	175,410	1,824,590	0
Pennsylvania	14,022,653	3,002,847	1,338,822	4,361,050	14,505,707	0
South Dakota	0	47,000	0	0	0	0
Tennessee	759,990	803,127	397,592	0	0	0
Texas	5,579,823	0	0	1,435,317	0	0
Utah	3,188,809	0	0	843,596	1,156,404	0
Virginia	8,173,724	0	347,834	2,427,863	1,349,883	300,000
Washington	1,623,218	642,008	0	0	0	0
West Virginia	31,830,679	0	1,599,309	8,960,175	8,336,730	5,255,500
Wyoming	66,617,486	1,617	157,875	17,503,592	0	0
Cheyenne River Tribe	0	100,000	0	0	0	0
Crow Tribe	1,066,973	0	0	540,433	1,459,567	0
Hopi Tribe	825,979	0	0	523,834	0	0
Navajo Tribe	7,671,379	0	0	4,630,266	0	0
Uintah/Ouray Tribe	0	1,100	0	0	0	0
Wind River Tribe	0	1,500	0	0	0	0
Federal Share**	(20,550)					
Total	\$238,153,437	\$11,597,080	\$8,455,922	\$69,801,600	\$57,110,400	\$8,881,350

* The term "Distribution" is now used instead of "Allocation". Allocation refers to the "pooling" of monies collected for the AML Fund. State and federal share distribution amounts are based on formulae set forth in Directive AML-18 dated November 26, 1992. Emergency distribution amounts are based on figures provided annually by the Assistant Director, Reclamation and Regulatory Policy, and as approved during the year by the Deputy Director.

** This amount represents unidentified collections which were credited to the federal collections holding account at the end of fiscal year 1992. During 1993, these collections were identified and transferred to the appropriate state account.

issued in 1993 describes 18 of the 182 projects completed in 1990. The evaluation team found the overall quality of federal reclamation work and the abatement of emergencies to be excellent. No major deficiencies in design or control work were found and no recommendations for improvement were given in the report. Minor deficiencies were referred to the respective states for appropriate action.

EMERGENCY PROJECTS



OSM Emergency Projects 1978-93

practices if an emergency exists.

Emergency projects are those involving abandoned mine lands that present a danger to public health, safety, or general welfare and which require immediate action.

Under Section 410(a) of SMCRA, the Secretary of the Interior is authorized to expend monies from the Abandoned Mine Reclamation Fund for the emergency restoration, reclamation, abatement, control, or prevention of the effects of coal mining

Since the beginning of the program, OSM has encouraged states to take over emergency project responsibility. Beginning in 1983, Arkansas and Montana assumed emergency project responsibility, followed by Illinois in 1984. During 1988 and 1989, Kansas, Virginia, and West Virginia took over responsibility for their emergency projects. Alabama assumed responsibility in 1990, followed by Ohio in 1992, and Alaska and North Dakota in 1993. In 1989, OSM established an emergency policy that provided federal-share funds, in addition to the formula-based allocation, to states with emergency programs.

In 1993 the average number of days required to respond to complaints (notification of a possible emergency problem) averaged 1.2 in the East and 1.5 in the West. The total days from complaint referral to construction averaged 66.5 days in the East and 14.2 in the West. This represents a 27 percent improvement in response (an 11 percent reduction in days from complaint referral to construction) compared with 1992. Of the 346 emergency complaint investigations referred by OSM field offices, 240 resulted in declaration of emergencies, 44 were determined to be not of an emergency nature, 6 were considered not related to coal mining or were reclaimed by the landowner, and 56 were still under investigation on September 30, 1993. The mining-related complaints not of an emergency nature were referred to

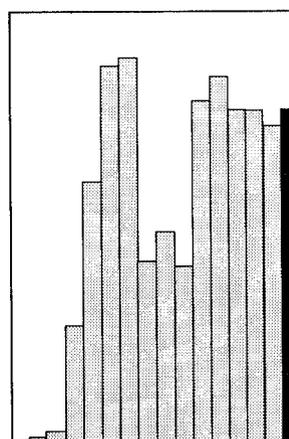
the states for their consideration as high-priority AML grant projects.

Due to funding limitations in 1993, not all new emergency projects were funded; however, obligations were made on 311 projects, including 252 for current year projects and 59 for pre-1993 projects. The ten states with emergency programs initiated 277 emergency projects in 1993. Table 13 summarizes high-priority and emergency project obligations by state for 1993.

POST-SMCRA RECLAMATION PROGRAM

As authorized in the 1993 appropriation (Public Law 102-381), federal civil penalties collected under Section 518 of SMCRA were used to reclaim lands mined and abandoned after August 3, 1977. In 1993, OSM funded two reclamation projects costing a total of \$333,725. An additional \$273,002 in unobligated funds will be carried over for use in reclaiming 1994 projects. Table 14 summarizes 1993 post-SMCRA reclamation projects.

GRANTS TO STATES AND TRIBES



Grants & Cooperative Agreements 1978-93

Beginning with Texas in 1980, OSM has approved state reclamation programs so that currently all primacy states except Mississippi have approved AML programs. During 1988, the Navajo and Hopi Tribe programs were approved, and in 1989 the Crow Tribe received approval for its program. The states and the tribes received grants totaling \$192,570,939 in 1993. Since 1981, when the states began receiving AML administrative grants to operate

their programs and construction grants to complete reclamation projects, states have received \$1,934,227,531 from the Abandoned Mine Reclamation Fund. Of that amount, approximately \$600 million was applied to administration grants, set-aside and subsidence insurance programs, emergency programs, and initial program development and cooperative agreement costs. Total net grant awards for AML construction projects from grants were \$1.4 billion, and construction obligations at the state/tribe level were \$1.3 billion. Grant amounts for 1993 are shown in Table 15. On-the-ground coal mine reclamation accomplishments resulting from grant funding through 1993 are summarized in Tables A-5 and A-7.

**TABLE 13
FEDERAL RECLAMATION PROGRAM PROJECTS
1993 OBLIGATIONS**

State or Tribe	Emergency	High Priority	Total 1978-93
Alabama	\$0	\$0	\$13,934,015
Alaska	0	0	194,638
Arkansas	0	0	84,904
California	0	0	1,048,643
Colorado	6,768	0	1,833,313
Georgia	0	135,673	1,903,371
Illinois	0	0	5,376,749
Indiana	299,610	0	3,862,909
Iowa	5,088	0	1,080,038
Kansas	0	0	5,094,172
Kentucky	5,477,754	0	71,678,308
Maryland	520,659	0	2,537,645
Michigan	25,556	104,428	1,834,815
Missouri	59,278	0	7,779,966
Montana	0	0	729,058
New Mexico	0	0	2,364,696
North Carolina	0	0	205,407
North Dakota	8,320	0	1,723,933
Ohio	345,432	0	18,444,593
Oklahoma	9,315	0	1,191,814
Oregon	0	0	42,275
Pennsylvania	3,002,847	0	82,667,404
Rhode Island	0	0	556,229
South Dakota	0	47,000	47,000
Tennessee	283,127	520,000	15,591,772
Texas	0	0	283,849
Utah	0	0	123,791
Virginia	0	0	10,139,719
Washington	139,514	502,494	4,344,568
West Virginia	0	0	29,023,226
Wyoming	1,617	0	1,066,738
Cheyenne River Tribe	0	100,000	2,412,372
Crow Tribe	0	0	1,097,895
Fort Berthold Tribe	0	0	69,972
Fort Peck Tribe	0	0	147,991
Hopi Tribe	0	0	1,263,409
Jicarilla Apache Tribe	0	0	50,998
Navajo Tribe	0	0	2,222,792
Northern Cheyenne Tribe	0	0	580,005
Southern Ute Tribe	0	0	94,206
Rocky Boy Tribe	0	0	60,188
Uintah/Ouray Tribe	0	1,100	138,738
Ute Mountain Ute Tribe	0	0	14,300
White Mountain Apache Tribe	0	0	1,838
Wind River Tribe	0	1,500	73,267
Zuni Tribe	0	0	125,009
Total	\$10,184,885	\$1,412,195	\$295,142,538

Based on initiatives proposed by OSM in 1991, the Office of Management and Budget asked OSM to assess the feasibility of revising the grant process used for the AML program. In response, OSM implemented a pilot program in 1993 by providing simplified AML grants to the states for carrying out reclamation activities. Simplified grants provided the states with more authority, flexibility, and responsibility in operating their AML programs.

Simplified grant funding of state AML programs streamlined the grant application process by eliminating the requirement for advance approval of each AML project before OSM awarded a state grant for AML reclamation. Instead, within the limits of existing authority, 16 states received amounts based on appropriated spending levels and are held accountable for using those funds in accordance with their approved AML plan. OSM's role moved away from cumbersome and detailed pre-award scrutiny of state grant applications.

Empowering the states in this manner recognizes the states' acknowledged record of accomplishment in AML work and reflects OSM's confidence in the states' ability to operate effective AML programs.

Progress in revising the AML grants process during 1993 included the following:

- A final change to current National Environmental Policy Act procedures was published in the Federal Register on March 10, 1993.
- A Federal Assistance Manual revision to implement AML simplified grants was issued January 6, 1993.
- Part 886 AML grant regulations are being modified to reflect the simplified process. A proposed rule is scheduled to be published in the *Federal Register* in early 1994.

MINIMUM PROGRAM GRANT FUNDING

The minimum-level program was established by Congress in 1988 to assure funding of existing high-priority projects in states where the annual allocation is too small for the state to administer a program and initiate reclamation.

Alaska, Arkansas, Iowa, Kansas, Maryland, Missouri, New Mexico, North Dakota, Oklahoma, Utah, and the Crow Tribe were eligible for minimum-level program funding during 1993 and received such grants during the year. Authorized funding of the minimum-level program remained at \$2,000,000 in 1993. Eligible states received \$14,669,719 federal-share money in 1993. This funding brought the 11* states and the Crow Tribe to the minimum-program level. Once the minimum program states/tribe complete their high-priority projects listed in the National Inventory of AML Problems, annual funding is limited to state-share money.

STATE-SHARE SET-ASIDE GRANTS

Beginning in 1987, Public Law 100-34 authorized states to set aside up to 10 percent of the state-share portion of their annual AML reclamation grants. Set-aside money was deposited into special trust funds, and became available, along with interest earned, for use by the state for reclaiming AML problems after August 3, 1992, the original expiration date for the collection of AML reclamation fees. (Subsequent legislation extended this date to September 30, 2004.) Statutory amendments contained in Public Law 101-508 created a new set-aside program which does not supersede the transfer funds deposited under the original 1987 program. The funds set aside under the new program may be utilized only after September 30, 1995, and only to reclaim eligible Priority 1 and 2 coal AML problems. In 1993, ten states/tribes set aside a total of \$6,172,790.

*Colorado was not considered a minimum program state in 1993 because its original distribution was over \$2,000,000; therefore, Colorado was taken out of the calculation for minimum program contributions.

**TABLE 14
POST-ACT RECLAMATION PROJECTS
1993**

State	Project Name and Description
Kentucky	Sam Sloan Slide - A large volume of coal mine spoil, including trees and stumps, slid off a hillside and blocked Branhams Creek. An occupied residence was in the direct path of the landslide.
Kentucky	Rowenna Caldwell Landslide - A large landslide being charged by seepage from abandoned underground auger mines was threatening five occupied residences.

TABLE 15
AML GRANTS¹ TO PRIMACY STATES AND INDIAN TRIBES
1993

State/ Tribe	Subsidence Insurance	10% Program Set-Aside	Administration ⁵	Construction ⁶	Emergency ⁷	Total
Alabama	\$0	\$0	\$553,074	\$3,280,827	\$300,000	\$4,133,901
Alaska	0	0	152,134	2,355,742	25,000	2,532,876
Arkansas	0	0	403,091	1,514,181	25,000	1,942,272
Colorado	0	200,000	370,000	1,465,000	0	2,035,000
Illinois	0	0	937,342	7,372,818	709,235	9,019,395
Indiana	0	451,322	1,521,678	5,200,000	0	7,173,000
Iowa	0	0	370,401	1,674,824	0	2,045,225
Kansas	0	0	193,594	3,721,546	474,578	4,389,718
Kentucky	0	0	1,273,196	13,455,467	0	14,728,663
Louisiana	0	0	82,454	0	0	82,454
Maryland	0	263,223	310,986	1,906,116	0	2,480,325
Missouri	0	75,888	419,865	2,407,139	0	2,902,892
Montana ⁴	0	337,623	415,728	4,715,408	125,000	5,593,759
New Mexico	0	200,000	694,751	976,037	0	1,870,788
North Dakota	0	200,000	469,056	1,321,982	0	1,991,038
Ohio	0	0	3,423,250	5,354,876	1,915,850	10,693,976
Oklahoma ²	0	0	888,548	1,191,830	0	2,080,378
Pennsylvania	0	3,781,707	2,881,186	42,089,681	0	48,752,574
Texas	0	0	926,562	2,448,000	0	3,374,562
Utah	0	0	430,528	1,664,000	0	2,094,528
Virginia ³	0	0	1,321,920	4,792,291	300,000	6,414,211
West Virginia	1,084,555	0	5,618,617	17,312,466	5,642,684	29,658,322
Wyoming	0	0	386,126	17,788,869	0	18,174,995
Crow Tribe	0	200,000	230,867	1,575,133	0	2,006,000
Hopi Tribe	0	0	109,022	34,366	0	143,388
Navajo Tribe	0	463,027	1,312,276	4,481,396	0	6,256,699
Total	\$1,084,555	\$6,172,790	\$25,696,252	\$150,099,995	\$9,517,347	\$192,570,939

1. Funding for these grants is derived from the FY 1993 distribution and funds recovered or carried over from previous years. Downward adjustments of prior-year awards are not included in the totals.

2. Construction amount includes \$54,159 in construction costs from a reimbursable cooperative agreement (GR299401).

3. Administrative amount includes \$42,888 for coalbed mapping grant.

4. 10% set-aside amount also contains \$101,287 in Acid Mine Drainage set-aside funding.

5. Administrative amounts for some states/tribes contain non-emergency indirect costs which are applicable to their entire AML program. These costs cannot be broken down into separate cost categories.

6. Construction amounts contain both non-water supply and water supply construction monies.

7. Emergency amounts contain indirect costs which are not directly attributable to either emergency construction or emergency administrative costs.

SUBSIDENCE INSURANCE PROGRAM

Public Law 98-473 authorized states and tribes with approved reclamation programs to use abandoned mine land funds for establishing self-sustaining, individually administered programs to insure private property against damage caused by land subsidence resulting from abandoned underground coal mines. Implementing rules were promulgated in February 1986. Under those rules, states can receive a subsidence insurance grant of up to \$3,000,000, awarded from the state's share of the AML Fund. In 1993 one subsidence insurance grant was issued. Through 1993, OSM has granted a total of \$11,569,662 to Colorado, Indiana, Kentucky, Ohio, West Virginia, and Wyoming to develop and administer subsidence insurance programs.

ABANDONED MINE LAND INVENTORY

SMCRA, as amended by the Abandoned Mine Reclamation Act of 1990 (Public Law 101-508), requires OSM to maintain an inventory of eligible abandoned mine lands and waters which meet the public health, safety, and general welfare criteria of SMCRA Section 403(1) and (2). During 1993, that inventory was completed and is currently in use.

In the early 1980s, OSM and the states compiled an initial inventory of abandoned mine land problems. Since then, the inventory has been maintained to reflect both newly identified problems and those that have received reclamation funding. Responding to the revisions to SMCRA, OSM identified projects that had been completed. OSM accomplished this by working with the states and tribes to add new problem areas* and validate existing records. As a result, OSM processed over 5,300 updated problem area records submitted for 23 program and 11 non-program states, and three program and 14 non-program Indian tribes.

In May 1993, OSM completed enhancement to its computerized Abandoned Mine Land Inventory System (AMLIS). The AMLIS system is used to provide statistical reports that track problems eligible for funding, estimated reclamation costs, and accomplishments. As of September 30, 1993, AMLIS contained information for a total of 11,300 problems areas (mostly related to abandoned coal mines) and showed \$919 million spent for completed coal AML reclamation projects and \$262 million presently funding ongoing coal AML projects. Table A-5 reports Priority 1 and 2 coal accomplishments, and Table A-7 contains Priority 3 coal AML accomplishments through 1993. Tables A-6 and A-8 show similar information for the Rural Abandoned Mine Program.

*A "problem area" is a geographic area (such as a watershed) containing one or more abandoned mine problems that could logically be corrected together. Problem area boundaries are delineated by the impacts on the surrounding land and water, not just the AML sites.

When comparing the data shown in these tables with previously reported AML accomplishments, differences will be apparent. Prior reports included data for OSM emergencies and non-coal AML projects. OSM emergencies are tracked in a separate computer system. AMLIS reports \$128.2 million spent on completed non-coal AML projects. That figure includes cumulative information provided voluntarily by Wyoming and Utah, in addition to non-coal reports for the states and tribes submitted after non-coal AML reporting requirements took effect in March 1992.

As of September 30, 1993, AMLIS also reported \$462,000 spent for a completed coal research project in Kentucky (completed when SMCRA allowed such projects to be funded by AML funds), and \$2.5 million in completed coal-related public infrastructure and utility projects in Wyoming. No projects were reported as completed through funding under SMCRA's acid mine drainage, insolvent surety, or interim site funding programs.

NATIONAL ABANDONED MINE LAND RECLAMATION AWARDS

After more than 15 years of abandoned mine land reclamation funded under the Surface Mining Control and Reclamation Act, thousands of dangerous health and safety problems throughout the country have been eliminated. Most people recognize the highly visible scars of the unreclaimed landscape as the result of past coal mining. But after abandoned mine problems are eliminated and reclamation is completed, it is nearly impossible to tell that health and safety problems ever existed on the site. Ironically, the better the reclamation, the less apparent it is.

To give well-earned public recognition to those responsible for the nation's most outstanding achievements in abandoned mine land reclamation, OSM initiated an annual national Abandoned Mine Land Reclamation Awards program in 1992. The program received a highly positive response from state reclamation programs, the coal industry (which paid the fee used to fund the reclamation work), and citizens living in the coal fields throughout the country. This year, 50 individuals responsible for the 10 award-winning projects received recognition. Positive public recognition:

- Promotes exemplary reclamation performance;
- Acknowledges the extra effort made by those responsible for achieving outstanding reclamation;
- Encourages the exchange and transfer of methods used to achieve successful reclamation; and

- Provides the public with a better understanding of mined-land reclamation achieved through the SMCRA Abandoned Mine Reclamation Fund.

Awards for the following projects were presented at the annual meeting of the National Association of State Abandoned Mine Land Programs:

- **Warrick Hospital RAMP Project.** This project was a cooperative effort of the city, the Soil Conservation Service, adjacent landowners, and the contractor. It eliminated dangerous health and safety abandoned mine hazards in a residential area near a hospital and an elementary school in Boonville, Indiana.
- **Coppermine Abandoned Mine Project.** The Coppermine project, located on the Navajo Indian Reservation in Coconino County, Arizona, eliminated open shafts, water pollution, soil erosion, and other abandoned mine land hazards resulting from historic copper mining. Reclamation was completed by the inhouse construction crew of the Tuba City, Arizona, Navajo Abandoned Mine Land Office.
- **Gay Branch Gob Pile Project.** The Gay Branch project in Clinchco, Virginia, reclaimed what was once rated the highest extreme danger site in the state. The project's outstanding results eliminated a variety of problems, ranging from open mine portals and steep refuse piles to fires that caused noxious smoke and fumes.
- **Lead and Zinc Mine Sites Reclamation Project.** This project eliminated 25 abandoned underground mine entries and shafts in and around historic Galena, Illinois, with minimal disturbance to the surrounding area. The contractor pumped polyurethane foam from lightweight trucks and used extensive hand labor to achieve excellent reclamation results.
- **Ocean Refuse Removal Project.** Reclamation of the former Ocean Mine, in Midland, Maryland, resulted in outstanding restoration of land and water resources at a site mined primarily for steamship coal from the 1870s until the 1940s. The project included many unique challenges as it reclaimed the area, but finally, after more than a century, the newly landscaped site is an asset to the community.
- **Pine Creek Mine Shafts Project.** At the Pine Creek project, in Logan County, West Virginia, vertical air shafts abandoned about 30 years ago were adjacent to a public road. To eliminate the danger associated with the 250-foot-deep shafts, the project used foam concrete to fill the shafts and a concrete cap to seal them. Then the area was landscaped.
- **Pyramid Coal Company Reclamation Project.** At this site, a surface mine near Pinckneyville, Illinois, disturbed about 3,000 acres and left the area covered with acid-forming refuse. Reclamation eliminated the sources of acid water and acid mine drainage and revegetated 270 acres of barren land.
- **Shiloh Reclamation Project.** The Shiloh Reclamation Project, in Russellville, Arkansas, was a joint effort by the Corps of Engineers, the City of Russellville, the Russellville Rotary Club, and the AML Fund. The project eliminated abandoned mine hazards at site that was partially flooded by the Arkansas River and frequently used as a recreation site by local residents. Major regrading and landscaping of the area with more than 2,600 trees and shrubs resulted in a high-quality, hazard-free recreation center for local residents.
- **Veca Pit and Spoils Project.** The Veca Pit was an abandoned uranium mine near Gas Hills, Wyoming. Spoil on the surface contained high levels of radioactive wastes and heavy metals. During reclamation, the contractor segregated contaminated material and buried it. Grading the site recreated the gently rolling landscape that existed before mining.
- **White Oak IV Reclamation Project.** The White Oak project, in Gallia County, Ohio, included reclamation of a 70-acre site containing highly acidic and erodible spoil. During reclamation more than five million gallons of acid mine drainage was treated, in addition to treating, draining, and backfilling mine pits at the site. With those problems eliminated, local streams are returning to their pre-mining condition.

7. OSM INFORMATION

The OSM publication and tapes listed below, as well as others that were completed in previous years, are distributed upon request. Published technical research reports are also available from the Department of Commerce's National Technical Information Service (NTIS). Information made available in 1993 is listed below, with location of availability shown in parenthesis after each citation.

U.S. Department of the Interior, 1993. *Office of Surface Mining Annual Report, Fiscal Year 1992*. Office of Surface Mining, Washington, D.C., 35 pp. (Public Affairs Office, OSM Headquarters)

U.S. Department of the Interior, 1993. *Surface Coal Mining Reclamation: 15 years of Progress, 1977-1992: A report on the protection and restoration of the Nation's land and water resources under Titles IV and V of the Surface Mining Control and Reclamation Act of 1977, Part 2. Statistical Information*. Office of Surface Mining, Washington, D.C., 78 pp. (Public Affairs Office, OSM Headquarters or Field Offices)

U.S. Department of the Interior, 1993. 1992 Excellence in Surface Coal Mining and Reclamation Awards Video Program -- A 12 minute VHS video program describing the 1992 winning reclamation operations. Office of Surface Mining, Washington, D.C. (Available on loan from Public Affairs Office, OSM Headquarters)

U.S. Department of the Interior, 1993. *1993 Excellence in Surface Coal Mining and Reclamation Awards: Call for nominations*. Office of Surface Mining, Washington, D.C., flyer, 6 pp. (Public Affairs Office, OSM Headquarters)

U.S. Department of the Interior, 1993. 1992 National Abandoned Mine Land Reclamation Awards Video Program -- A 12 minute VHS video program describing the 1992 winning abandoned mine reclamation projects. Office of Surface Mining, Washington, D.C. (Available on loan from Public Affairs Office, OSM Headquarters)

U.S. Department of the Interior, 1993. *1993 National Abandoned Mine Land Reclamation Awards: Call for nominations*. Office of Surface Mining, Washington, D.C., flyer, 6 pp. (Public Affairs Office, OSM Headquarters)

U.S. Department of the Interior, 1992. *Experimental practices: Case Histories*, 1992 Edition. Office of Surface Mining, Pittsburgh, Pennsylvania, 44 pp. (Eastern Support Center, Pittsburgh)

U.S. Department of the Interior, 1992. *RecTec* Number 14, November 1992. Office of Surface Mining, Washington, D.C., 4 pp. (Division of Technical Services, OSM Headquarters)

U.S. Department of the Interior, 1992. *RecTec* Number 15, January 1993. Office of Surface Mining, Washington, D.C., 4 pp. (Division of Technical Services, OSM Headquarters)

U.S. Department of the Interior, 1992. *RecTec* Number 16, March 1993. Office of Surface Mining, Washington, D.C., 4 pp. (Division of Technical Services, OSM Headquarters)

U.S. Department of the Interior, 1992. *RecTec* Number 17, May 1993. Office of Surface Mining, Washington, D.C., 4 pp. (Division of Technical Services, OSM Headquarters)

U.S. Department of the Interior, 1992. *RecTec* Number 18, July 1993. Office of Surface Mining, Washington, D.C., 4 pp. (Division of Technical Services, OSM Headquarters)

Johnston, M.A. and P.J. Carpenter, 1993. "Fracturing of Glacial Drift and Bedrock Over Longwall Mine Panels: Integrated Geophysical and Hydrological Measurements," in *Proceedings of the Symposium on the Application of Geophysics to Engineering and Environmental problems*; Environmental and Engineering Geophysical Society, R.S. Bell and C.M. Lepper, Eds., 393-414. (Eastern Support Center, Pittsburgh)

Schroeder, Stephan A., and Kevin C. Vining, 1993. "Relation of Compaction and Soil Physical Parameters to Productivity of Reclaimed Soils." North Dakota State University (location not cited), 136 pp. (NTIS Accession Number PB94-103546)

Vallejo, L.E., R.A. Welsh Jr., C.W. Lovell, and M.K. Robinson, 1992. "The Influence of Fabric and Composition on the Durability of Appalachian Shales," *Rock for Erosion Control*, ASTM STP 1177, Charles H. McElroy and David A. Lienhart, Eds., American Society for Testing and Materials, Philadelphia.

Appendix



United States Department of the Interior

Bruce Babbitt, *Secretary of the Interior*

Robert Armstrong, *Assistant Secretary for Land and Minerals Management*

Office of Surface Mining

Anne H. Shields, *Acting Director*

(COVER PHOTO) *Reclaimed mine land near Colstrip, Montana*

Because livestock grazing is the predominant land use in southeastern Montana, most land is reclaimed to rangeland. At this site, mining and reclamation occurred in the foreground as mining continues in the background. Reclamation of this native grassland included planting seed of many species of grasses, forbs, and shrubs. This was followed by planting containerized shrubs at a rate of 100-150 per acre. In some areas native trees have also planted.

**Office of Surface Mining
Annual Report
Fiscal Year
1993
Appendix**



**United States Department of the Interior
Office of Surface Mining Reclamation and Enforcement
Washington, D.C. 20240
January 1994**

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INTRODUCTION

The OSM Annual Report was compiled for the President and the Congress as required by Section 706 of the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The report describes the operations of the Interior Department's Office of Surface Mining Reclamation and Enforcement (OSM) for the period October 1, 1992, through September 30, 1993 -- Fiscal Year 1993¹. Included in this report are activities carried out under Title IV, Abandoned Mine Reclamation; Title V, Control of the Environmental Impacts of Surface Coal Mining; Title VI, Designation of Lands Unsuitable for Non-coal Mining; and Title VII, Administrative and Miscellaneous Provisions.

Each year OSM receives a number of requests for statistical information that describes SMCRA implementation (including mining, regulation, and reclamation) and the location of OSM and regulatory authority offices. Much of this information has been contained in the annual reports to Congress; however, those reports were printed in small quantities and received only limited distribution. To fill requests for this information from the public, pages in the annual report were copied and/or additional information was compiled. To eliminate this repetitive work and machine copying, OSM's 1993 annual report to Congress includes an Appendix that contains: 1. a state-by-state statistical summary of the past year's mining and reclamation activities, and 2. a list of the Office of Surface Mining and state regulatory authority/abandoned mine land program office locations. Although the annual report is still printed in limited quantities and distributed mainly to Congress and to those directly involved with implementing SMCRA, the appendix to the annual report is more widely available to the general public.

For information about OSM activities, news releases, and publications, or for additional copies of this report, contact:

Public Affairs
Office of Surface Mining
1951 Constitution Ave., NW
Washington, D.C. 20240
(202) 208-2553

1. Throughout this document, "1993" always refers to FY 1993, unless otherwise noted.

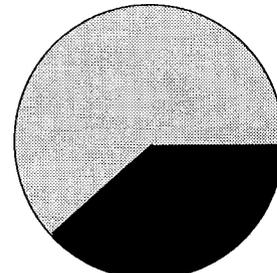
**TABLE A-1
COAL PRODUCTION¹**

State	1978-1993		199 Surface
	Total Production	U.S. Percent	
Alabama	405,485,576	2.9%	9,216,530
Alaska	18,857,454	.1%	1,671,223
Arkansas	2,565,543	.01%	76,984
California	305,065	.002%	0
Colorado	275,887,698	1.9%	8,717,987
Georgia	570,448	.004%	0
Illinois	941,332,089	6.7%	9,606,630
Indiana	492,034,576	3.5%	26,639,576
Iowa	7,461,738	.05%	159,914
Kansas	16,388,960	.1%	367,509
Kentucky	2,363,282,986	16.9%	63,873,239
Louisiana	22,989,022	.1%	3,136,224
Maryland	55,948,979	.4%	890,077
Missouri	70,448,573	.5%	1,045,587
Montana	492,237,152	3.5%	33,780,317
New Mexico	152,306,266	1.0%	13,817,022
North Dakota	374,450,555	2.6%	31,847,306
Ohio	561,105,713	4.0%	17,156,931
Oklahoma	55,295,526	.3%	1,566,661
Pennsylvania	1,192,898,760	8.5%	21,286,686
Tennessee	114,295,596	.8%	1,178,510
Texas	678,560,214	4.8%	54,382,248
Utah	254,137,605	1.8%	29,658
Virginia	632,477,678	4.5%	9,109,663
Washington	75,247,640	.5%	4,691,800
West Virginia	2,089,031,251	15.0%	44,355,567
Wyoming	2,168,888,561	15.5%	197,898,701
Crow Tribe	45,305,398	.3%	3,050,626
Hopi Tribe	38,533,106	.2%	3,193,795
Navajo Tribe	319,753,228	2.2%	21,568,675
Total	13,918,082,956	100.0%	584,315,646

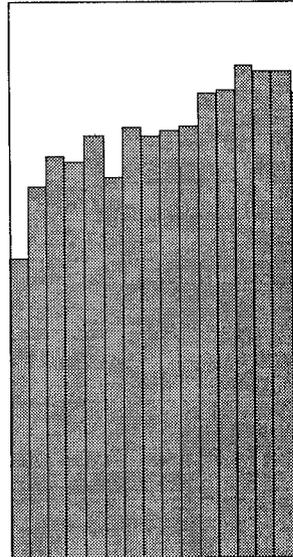


Coal Resources

Production <i>Underground</i>	1993 Production	
	<i>Total</i>	<i>U.S. Percent</i>
15,826,285	25,042,815	2.6%
0	1,671,223	.1%
0	76,984	.008%
0	0	0.0%
11,721,151	20,439,138	2.1%
0	0	0.0%
38,828,281	48,434,911	5.0%
1,321,314	27,960,890	2.9%
0	159,914	.01%
0	367,509	.03%
91,721,595	155,594,834	16.3%
0	3,136,224	.3%
2,370,837	3,260,914	.3%
0	1,045,587	.1%
11,553	33,791,870	3.5%
731,524	14,548,546	1.5%
0	31,847,306	3.3%
10,622,930	27,779,861	2.9%
73,821	1,640,482	.1%
39,842,324	61,129,010	6.4%
1,884,686	3,063,196	.3%
0	54,382,248	5.7%
21,734,784	21,764,442	2.2%
31,107,536	40,217,199	4.2%
0	4,691,800	.4%
99,513,299	143,868,796	15.0%
2,301,098	200,199,799	20.9%
0	3,050,626	.3%
0	3,193,795	.3%
0	21,568,675	2.2%
369,612,948	953,928,594	100.0%



1993 U.S. Production
 Surface Mining
 Underground Mining



U.S. Coal Production 1979-1993

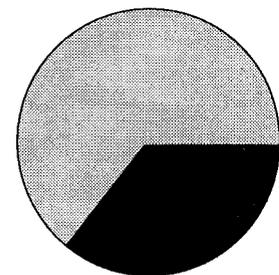
**TABLE A-2
NUMBER OF MINES²
1993**

State	Surface Mining	Underground Mining
Alabama	54	12
Alaska	1	0
Arkansas	6	0
California	0	0
Colorado	7	12
Georgia	0	0
Illinois	18	25
Indiana	53	3
Iowa	2	0
Kansas	2	0
Kentucky	234	338
Louisiana	2	0
Maryland	26	2
Missouri	4	0
Montana	7	1
New Mexico	5	1
North Dakota	6	0
Ohio	128	8
Oklahoma	15	1
Pennsylvania	500	96
Tennessee	11	17
Texas	15	0
Utah	1	19
Virginia	45	164
Washington	2	0
West Virginia	182	281
Wyoming	26	3
Crow Tribe	1	0
Hopi Tribe	2	0
Navajo Tribe	4	0
Total	1,359	983

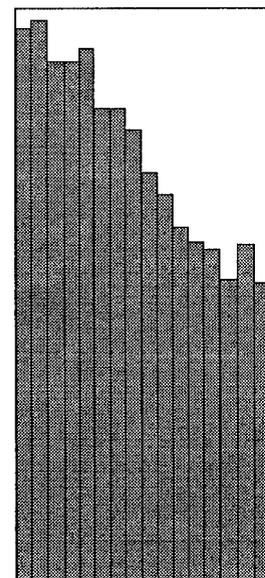
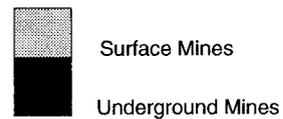


States with 1993 Coal Product

Total	U.S. Percent
66	2.8%
1	.04%
6	.2%
0	0.0%
19	.8%
0	0.0%
43	1.8%
56	2.3%
2	.08%
2	.08%
572	24.4%
2	.08%
28	1.1%
4	.1%
8	.3%
6	.2%
6	.2%
136	5.8%
16	.6%
596	25.4%
28	1.1%
15	.6%
20	.8%
209	8.9%
2	.08%
463	19.7%
29	1.2%
1	.04%
2	.08%
4	.1%
2,342	100.0%



1993 Number of Mines



Number of Mines 1978-1993

**TABLE A-3
PERMITS ISSUED AND BONDS RELEASED³
1993**

State	Number of Permits Approved						Acreage Permitted					
	New Permits			Renewals			New Permits			Renewals		
	Surface	Underground	Other	Surface	Underground	Other	Surface	Underground	Other	Surface	Underground	Other
Alabama	19	0	0	39	0	0	4,204	0	0	13,889	0	0
Alaska	1	0	0	0	0	0	131	0	0	0	0	0
Arkansas	0	1	0	1	0	0	0	71	0	40	0	0
California	0	0	0	0	0	0	0	0	0	0	0	0
Colorado	0	0	0	7	8	0	0	0	0	13,670	276	0
Georgia	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	9	1	0	8	13	0	3,092	124	0	3,235	1,555	0
Indiana	7	1	5	9	0	0	2,326	623	204	15,986	0	0
Iowa	1	0	0	6	0	0	250	0	0	1,756	0	0
Kansas	1	0	0	0	0	0	1,528	0	0	0	0	0
Kentucky	63	64	14	23	46	7	14,698	39,597	1,049	10,280	43,062	1,792
Kentucky*	0	2	0	1	0	0	0	831	0	1,597	0	0
Louisiana	0	0	0	0	0	0	0	0	0	0	0	0
Maryland	1	1	0	2	0	2	72	5	0	185	0	8
Missouri	1	0	0	10	0	0	465	0	0	1,903	0	0
Montana	0	1	0	5	0	0	0	0	0	22,105	0	0
New Mexico	0	0	1	0	1	0	0	0	33	0	34	0
North Dakota	0	0	0	3	0	0	7,885	0	0	0	0	0
Ohio	76	5	1	25	1	14	6,361	1,622	5	8,077	541	390
Oklahoma	7	0	0	0	0	0	2,662	0	0	0	0	0
Pennsylvania	89	12	9	215	48	49	2,469	20	517	2,489	3	223
Tennessee	1	2	5	3	11	10	670	14	772	356	184	412
Texas	2	0	0	4	0	0	2,980	0	0	47,522	0	0
Utah	0	0	1	0	1	0	0	0	33	0	34	0
Virginia	14	14	9	26	23	7	3,230	147	157	5,427	167	375
Washington	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia	56	55	30	123	243	239	12,062	996	2,240	31,843	8,649	11,046
Wyoming	0	0	0	6	1	0	0	0	0	575	0	0
Crow Tribe	0	0	0	1	0	0	0	0	0	3,257	0	0
Hopi Tribe	0	0	0	0	0	0	0	0	0	0	0	0
Navajo Tribe	0	0	0	0	0	0	0	0	0	0	0	0
Total	348	159	75	517	396	328	62,085	44,050	5,010	184,192	54,505	14,246

* Federal lands in Kentucky



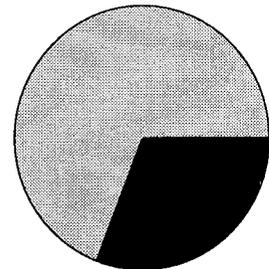
State Regulatory Programs

Bond Release

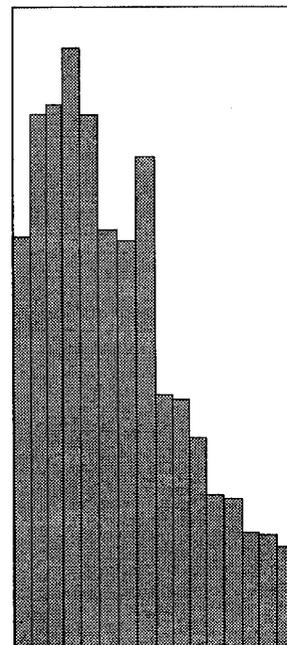
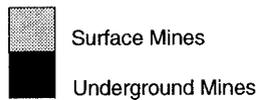
Number of Release Applications Approved

Acreage Released

Phase 1	Phase 2	Phase 3	Phase 1	Phase 2	Phase 3
41	27	30	3,330	2,005	1,984
0	0	0	0	0	0
2	1	8	41	42	186
0	0	1	0	0	39
1	0	0	105	0	0
0	0	0	0	0	0
18	7	6	982	175	140
40	38	19	3,718	2,395	1,160
0	0	0	0	0	0
0	2	2	0	142	387
542	483	319	1,437,872	1,363,679	966,771
1	3	0	16	303	0
1	0	0	711	0	0
3	11	11	57	351	171
7	3	2	1,111	377	30
0	0	0	0	0	0
0	1	1	0	4	4
4	1	3	397	95	109
197	297	181	6,532	11,551	6,502
10	19	17	1,495	3,285	2,397
405	320	346	14,796	14,894	16,681
10	17	22	685	1,016	591
0	1	2	0	181	400
0	1	1	0	4	4
13	79	46	Not Available	Not Available	1,454
0	0	0	0	0	0
151	95	178	8,428	3,409	5,740
0	1	3	0	656	165
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
1,446	1,407	1,198	1,480,276	1,404,564	1,004,915



1993 New Permits



Permits Issued 1978-1993

**TABLE A-4
STATE AND FEDERAL ENFORCEMENT ACTIONS⁴
1993**

State	INSPECTIONS		OSM
	Complete	State Partial	
Alabama	3,989	776	192
Alaska	17	32	8
Arkansas	138	274	23
California	0	0	15
Colorado	244	450	32
Illinois	447	989	82
Indiana	1,528	2,362	174
Iowa	112	224	26
Kansas	88	176	18
Kentucky	16,308	18,443	1,610
Louisiana	8	16	3
Maryland	535	947	88
Missouri	272	643	77
Montana	99	122	12
New Mexico	64	143	7
North Dakota	193	779	15
Ohio	3,131	4,755	300
Oklahoma	526	885	123
Pennsylvania	12,039	19,846	692
Tennessee	0	0	5,276
Texas	92	367	18
Utah	130	240	18
Virginia	3,994	4,205	469
Washington	0	0	38
West Virginia	9,926	16,735	693
Wyoming	195	311	25
Crow Tribe	0	0	12
Hopi Tribe****	0	0	90
Navajo Tribe****	-	-	-
Total	54,075	73,720	10,136

* Notices of Violation

** Failure To Abate Cessation Orders

*** Imminent Harm Cessation Orders

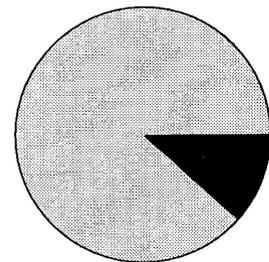
**** Information for Indian tribes in Arizona and New Mexico are combined when collected by the Albuquerque Field Office.



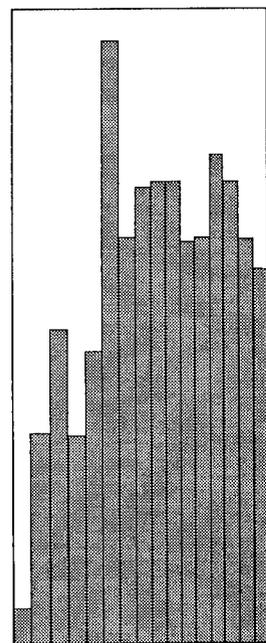
Federal Regulatory Programs

CITATIONS ISSUED

<i>NOV's*</i>	State <i>FTACO's**</i>	<i>IHCO's***</i>	<i>NOV's</i>	OSM <i>FTACO's</i>	<i>IHCO's</i>
330	43	12	0	0	0
5	0	0	0	0	0
5	0	0	0	0	0
0	0	0	0	0	0
129	4	1	2	1	0
58	1	0	0	0	0
268	9	1	1	2	0
38	1	0	0	0	0
8	7	0	1	0	0
1,509	263	12	50	5	4
2	0	1	0	0	0
78	21	0	1	1	0
48	1	0	0	0	0
12	1	1	0	0	0
14	0	0	0	0	0
4	0	0	0	0	0
458	67	12	0	0	1
90	21	3	3	1	2
1,999	138	0	8	7	0
0	0	0	207	20	4
39	0	0	1	0	0
73	4	1	1	0	0
335	37	16	5	1	0
0	0	0	0	0	0
2,851	383	41	28	7	0
19	0	0	1	0	1
0	0	0	0	0	0
0	0	0	15	0	0
-	-	-	-	-	-
8,372	1,001	101	324	45	12



1993 Citations Issued
 Notice of Violations
 Cessation Orders



Citations Issued 1978-1993

**TABLE A-5
ABANDONED MINE LAND RECLAMATION
(PRIORITY 1 & 2 ACCOMPLISHMENTS) 1978-1993⁵**

State	Clogged streams (Miles)	Clogged stream lands (Acres)	Dangerous highwalls (Lin. feet)	Dangerous impoundments (Count)	Dangerous piles & embankments (Acres)	Dangerous slides (Acres)	Gases: hazardous / explosive (Count)	Underground mine fires (Acres)	Hazardous equipment facilities (Count)
Alabama	2	0	75,165	1	29	8	0	0	44
Alaska	0	0	60	3	4	0	0	0	5
Arkansas	0	0	26,756	0	144	0	0	0	1
California	0	0	0	0	0	0	0	0	0
Colorado	0	0	50,342	0	7	0	0	59	1
Georgia	0	0	1,000	2	3	0	0	0	0
Illinois	13	545	9,764	6	89	0	15	0	163
Indiana	14	106	78,210	5	476	0	2	0	8
Iowa	1	217	36,175	1	485	0	0	0	6
Kansas	0	0	21,716	1	0	1	0	0	0
Kentucky	33	7,176	12,824	71	214	1,361	0	83	123
Louisiana	0	0	0	0	0	0	0	0	0
Maryland	3	41	26,680	0	99	17	0	0	15
Michigan	0	0	950	0	0	0	0	0	5
Missouri	8	1,129	37,917	4	157	0	0	0	11
Montana	3	2	200	2	83	1	0	60	18
New Mexico	0	0	0	0	2	0	0	0	10
North Dakota	0	0	17,496	4	168	0	0	0	14
Ohio	9	3853	14,828	4	55	261	0	0	31
Oklahoma	0	0	82,111	0	0	1	0	0	0
Pennsylvania	10	96	224,806	13	339	0	0	650	18
Tennessee	0	147	16,755	0	200	23	0	0	2
Texas	0	0	1,600	0	1,016	0	0	0	0
Utah	11	0	2,925	1	97	0	19	17	13
Virginia	46	558	5,683	7	201	130	0	0	13
Washington	0	0	0	0	2	0	0	0	0
West Virginia	25	147	111,871	120	2,031	248	1	18	19
Wyoming	0	0	9,011	1	503	0	0	0	1
Crow Tribe	0	0	650	0	33	22	0	0	0
Hopi Tribe	0	0	12,002	0	0	0	0	0	0
Navajo Tribe	0	0	0	1	1	7	0	0	0
CERT*	1	0	5,070	0	354	0	0	0	0
Total	179	14,178	882,567	247	6,792	2,080	37	887	1,86

*The Council of Energy Resources Tribes include: Blackfeet, Cheyenne River Sioux, Mandan, Hidatsa, and Arikara; Assiniboine and Sioux; Northern Cheyenne; Jicarilla Apache; Laguna Pueblo

Hazardous water bodies (Count)	Industrial/residential waste (Acres)	Portals (Count)	Polluted water: agri/ind (Count)	Polluted water: human use (count)	Subsidence (Acres)	Surface burning (Acres)	Vertical opening (Count)
23	20	737	0	9	10	49	243
0	3	6	0	0	0	0	3
2	11	3	0	0	0	2	54
0	0	0	0	0	0	0	1
0	1	437	1	0	42	12	220
0	0	67	0	1	1	0	6
0	12	81	0	0	6	10	231
3	21	41	6	6	16	2	246
24	1	0	12	0	1	0	8
0	2	0	1	0	22	3	5
16	48	1,056	5	2,149	51	184	57
0	0	0	0	0	0	0	0
9	15	17	3	1	9	0	1
2	0	0	0	0	1	8	12
4	69	3	20	13	0	16	21
0	74	696	18	12	529	40	416
0	0	97	1	0	26	32	44
14	2	13	3	0	844	1	61
4	34	103	0	163	40	72	107
51	0	60	0	0	13	0	41
39	12	188	2	2	1,676	61	247
9	11	139	0	4	5	1	10
0	0	2	0	0	0	0	19
0	2	465	2	0	2	34	23
1	0	409	0	0	2	25	44
0	0	26	0	0	1	0	35
1	12	1,095	7	5	145	246	45
0	1	192	0	0	277	9	221
0	0	4	1	0	16	0	4
0	0	9	0	0	0	0	2
0	0	140	0	0	5	3	7
30	5	72	0	0	35	0	18
232	356	6,158	82	2,365	3,775	810	2,452

Chippewa and Cree; San Carlos Apache; Southern Ute; Uintah and Ouray; Ute Mountain Ute; White Mountain Apache; and the Arapaho and Shoshone.

**TABLE A-6
RURAL ABANDONED MINE PROGRAM (RAMP) RECLAMATION
(PRIORITY 1 & 2 ACCOMPLISHMENTS) 1978-1993⁶**

State	Clogged streams (Miles)	Clogged stream lands (Acres)	Dangerous highwalls (Lin. feet)	Dangerous impoundments (Count)	Dangerous piles & embankments (Acres)	Dangerous slides (Acres)	Gases: hazardous / explosive (Count)	Underground mine fires (Acres)	Hazardous equipment facilities (Count)
Alabama	0	0	58,300	4	741	31	0	0	
Alaska	0	0	0	0	0	0	0	0	
Arkansas	0	0	28,920	2	1,326	100	0	0	
California	0	0	0	0	0	0	0	0	
Colorado	0	0	0	0	0	0	0	0	
Georgia	0	0	0	0	0	0	0	0	
Illinois	0	0	10,900	1	79	6	0	0	2
Indiana	0	0	874	0	46	0	0	0	
Iowa	0	74	18,200	0	38	0	0	0	
Kansas	1	0	1,400	0	1	0	0	0	
Kentucky	0	0	6,850	8	1,433	0	0	0	
Louisiana	0	0	0	0	0	0	0	0	
Maryland	0	0	24,250	1	3	0	0	0	
Missouri	0	84	0	0	62	0	0	0	
Montana	0	0	0	0	0	0	0	0	
New Mexico	0	0	0	0	0	0	0	0	
North Dakota	0	0	400	0	0	0	0	0	
Ohio	1	1,036	24,420	2	232	25	0	0	2
Oklahoma	0	0	21,564	0	144	45	0	0	
Pennsylvania	2	0	86,224	22	777	23	1	0	6
Tennessee	0	0	15,887	1	272	2	0	0	
Texas	0	0	0	0	0	0	0	0	
Utah	0	0	0	0	0	0	0	0	
Virginia	1	0	0	0	17	10	0	0	
Washington	0	0	0	0	0	0	0	0	
West Virginia	1	0	10,530	2	710	0	0	0	1
Wyoming	0	0	1,600	0	0	0	0	1	
Crow Tribe	0	0	0	0	0	0	0	0	
Hopi Tribe	0	0	0	0	0	0	0	0	
Navajo Tribe	0	0	0	0	0	0	0	0	
CERT*	0	1	0	0	21	0	0	0	
Total	6	1,195	310,319	43	5,902	242	1	1	13

*The Council of Energy Resources Tribes include: Blackfeet, Cheyenne River Sioux, Mandan, Hidatsa, and Arikara; Assiniboine and Sioux; Northern Cheyenne; Jicarilla Apache; Laguna Pueblo

Hazardous water bodies (Count)	Industrial/residential waste (Acres)	Portals (Count)	Polluted water: agri/ind (Count)	Polluted water: human use (count)	Subsidence (Acres)	Surface burning (Acres)	Vertical opening (Count)
15	1	2	1	1	0	2	0
0	0	0	0	0	0	0	0
9	132	6	0	0	23	0	6
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
2	18	5	1	1	24	0	14
0	4	37	0	0	18	0	85
5	0	0	18	0	0	10	1
0	0	0	0	0	0	0	0
0	0	44	0	0	14	0	1
0	0	0	0	0	0	0	0
6	4	13	0	0	3	0	0
0	0	0	0	1	0	0	1
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	118	0	0
29	1	12	0	1	1	1	27
5	0	0	0	0	0	0	0
10	7	192	3	0	8	8	20
18	0	50	0	0	0	0	4
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	14	0	0	0	0	0
0	0	0	0	0	0	0	0
3	0	150	0	0	12	18	3
0	0	25	0	0	1	1	321
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	3	0	0	3	0	2
102	167	553	23	4	225	40	485

Chippewa and Cree; San Carlos Apache; Southern Ute; Uintah and Ouray; Ute Mountain Ute; White Mountain Apache; and the Arapaho and Shoshone.

**TABLE A-7
ABANDONED MINE LAND RECLAMATION
(PRIORITY 3 ACCOMPLISHMENTS) 1978-1993⁷**

State	Bench (Acres)	Industrial/ residential waste (Acres)	Equipment facilities (Count)	Gob piles (Acres)	Highwalls (Lin. feet)	Haul roads (Acres)
Alabama	1	6	7	84	13,625	0
Alaska	0	0	0	7	0	0
Arkansas	0	0	0	0	0	0
California	0	0	0	0	0	0
Colorado	1	5	7	62	2,028	0
Georgia	0	0	0	3	0	0
Illinois	1	12	79	1,827	510	41
Indiana	0	40	70	723	1,000	132
Iowa	0	0	0	1	0	5
Kansas	0	0	1	87	3,000	0
Kentucky	603	0	51	195	2,000	1
Louisiana	0	0	0	0	0	0
Maryland	0	0	1	21	3,650	1
Michigan	0	0	1	21	0	1
Missouri	0	3	4	68	8,624	1
Montana	6	64	77	233	1,670	3
New Mexico	1	0	6	27	0	0
North Dakota	0	0	0	0	0	0
Ohio	0	0	3	63	9,220	0
Oklahoma	0	0	0	0	0	0
Pennsylvania	0	0	5	21	5,400	0
Tennessee	76	0	2	48	130	8
Texas	0	0	0	8	0	0
Utah	4	7	58	229	550	3
Virginia	1	3	36	20	0	4
Washington	0	0	0	0	0	0
West Virginia	0	0	0	23	1,000	0
Wyoming	0	11	3	30	1,300	1
Crow Tribe	2	0	0	9	250	4
Hopi Tribe	0	0	0	19	551	15
Navajo Tribe	0	1	2	100	0	0
CERT*	0	0	2	4	1,500	0
Total	696	152	415	3,933	56,008	220

*The Council of Energy Resources Tribes include: Blackfeet, Cheyenne River Sioux, Mandan, Hidatsa, and Arikara; Assiniboine and Sioux; Northern Cheyenne; Jicarilla Apache; Laguna Pueblo

Mine openings	Pits	Spoil area	Slurry	Slump	Water problems
(Count)	(Acres)	(Acres)	(Acres)	(Acres)	(Gal/min)
10	1	4,552	30	1	30
0	0	0	9	25	0
0	0	0	0	0	0
0	0	0	0	0	0
18	76	847	0	0	1
0	0	0	0	0	0
73	148	1,811	816	0	236
11	6	1,139	197	2	26
1	24	445	0	0	0
0	17	255	0	222	0
68	3	955	58	10	0
0	0	0	0	0	0
0	0	212	0	1	70
0	1	10	0	11	0
0	453	452	57	1	86
55	34	846	0	21	273
0	2	1	2	0	0
0	0	0	0	0	0
19	17	391	0	0	0
0	0	0	0	0	0
3	31	610	1	1	487
0	47	293	0	3	194
0	0	152	0	0	0
0	6	49	1	16	20
20	0	0	0	0	10
0	0	0	0	0	0
1	0	1	0	0	2
4	10	385	0	0	400,002
0	3	4	0	0	0
0	10	10	0	0	0
12	15	141	0	0	0
1	7	80	0	0	0
296	911	13,641	1,171	314	401,437

Chippewa and Cree; San Carlos Apache; Southern Ute; Uintah and Ouray; Ute Mountain Ute; White Mountain Apache; and the Arapaho and Shoshone.

**TABLE A-8
RURAL ABANDONED MINE PROGRAM (RAMP) RECLAMATION
(PRIORITY 3 ACCOMPLISHMENTS) 1978-1993⁸**

State	Bench (Acres)	Industrial/ residential waste (Acres)	Equipment facilities (Count)	Gob piles (Acres)	Highwalls (Lin. feet)	Haul roads (Acres)
Alabama	0	0	0	0	0	0
Alaska	0	0	0	0	0	0
Arkansas	0	0	0	0	0	0
California	0	0	0	0	0	0
Colorado	0	0	0	0	0	0
Georgia	0	0	0	0	0	0
Illinois	0	0	0	4	0	0
Indiana	0	1	4	1	1	0
Iowa	0	0	0	0	0	0
Kansas	0	0	0	0	0	0
Kentucky	0	0	0	0	300	0
Louisiana	0	0	0	0	0	0
Maryland	0	0	0	0	0	0
Missouri	0	0	0	0	0	0
Montana	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0
Ohio	0	0	0	0	0	0
Oklahoma	0	0	0	0	0	0
Pennsylvania	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0
Texas	0	0	0	0	0	0
Utah	0	0	0	0	0	0
Virginia	0	0	0	0	0	0
Washington	0	0	0	0	0	0
West Virginia	0	0	0	0	0	0
Wyoming	0	0	0	2	0	0
Crow Tribe	0	0	0	0	0	0
Hopi Tribe	0	0	0	0	0	0
Navajo Tribe	0	0	0	0	0	0
CERT*	0	0	0	0	0	0
Total	0	1	4	7	301	0

*The Council of Energy Resources Tribes include: Blackfeet, Cheyenne River Sioux, Mandan, Hidatsa, and Arikara; Assiniboine and Sioux; Northern Cheyenne; Jicarilla Apache; Laguna Pueblo;

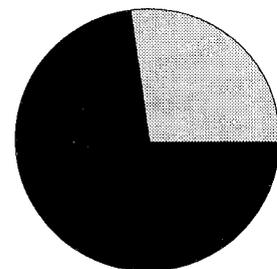
Mine openings (Count)	Pits (Acres)	Spoil area (Acres)	Slurry (Acres)	Slump (Acres)	Water problems (Gal/min)
0	1	95	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
4	0	16	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	1	9	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	193	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	46	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
4	2	359	0	0	0

Chippewa and Cree; San Carlos Apache; Southern Ute; Uintah and Ouray; Ute Mountain Ute; White Mountain Apache; and the Arapaho and Shoshone.

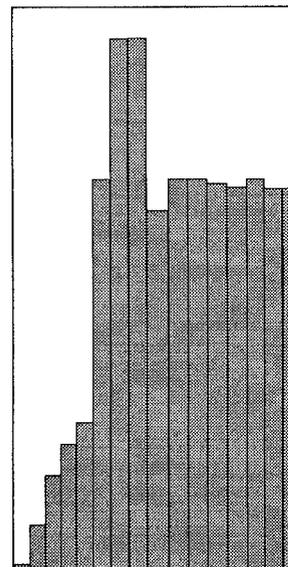
**TABLE A-9
PROGRAM FUNDING⁹
1993**

State	Regulatory Grants	OSM Projects and Emergencies	SOAP
Alabama	\$991,937	\$0	\$0
Alaska	194,321	0	0
Arkansas	164,803	0	0
California	0	0	0
Colorado	1,270,802	6,768	0
Georgia	0	135,673	0
Illinois	2,429,472	0	0
Indiana	1,611,393	299,610	0
Iowa	155,644	5,088	0
Kansas	103,337	0	0
Kentucky	13,043,352	5,477,754	500,000
Louisiana	201,347	0	0
Maryland	479,589	520,659	50,000
Michigan	0	129,984	0
Mississippi	75,565	0	0
Missouri	427,979	59,278	0
Montana	850,037	0	0
New Mexico	735,625	0	0
North Dakota	517,329	8,320	0
Ohio	2,964,699	345,431	264,000
Oklahoma	930,782	9,315	10,000
Pennsylvania	10,087,400	3,002,847	1,400,000
South Dakota	0	47,000	0
Tennessee	0	803,127	0
Texas	1,140,988	0	0
Utah	1,468,025	0	0
Virginia	2,947,672	0	10,000
Washington	0	642,008	0
West Virginia	6,919,241	0	140,000
Wyoming	1,871,672	1,617	0
Crow Tribe	0	0	0
Hopi Tribe	0	0	0
Navajo Tribe	0	0	0
Total	\$51,583,011	\$11,494,479	\$2,374,000

AML Grants	Civil Penalty Funded Projects	Total	AML Fees Collected
\$4,133,901	\$0	\$5,125,838	\$5,513,618
2,532,876	0	2,727,197	541,881
1,942,272	0	2,107,075	24,100
0	0	0	3,245
2,035,000	0	3,312,570	4,709,060
0	0	135,673	0
9,019,395	0	11,448,867	10,417,805
7,173,000	0	9,084,003	9,517,464
2,045,225	0	2,205,957	79,493
4,389,718	0	4,493,055	119,294
14,728,663	333,725	34,083,494	36,176,437
82,454	0	283,801	320,065
2,480,325	0	3,530,573	632,975
0	0	129,984	0
0	0	75,565	0
2,902,892	0	3,390,149	582,568
5,593,759	0	6,443,796	12,034,553
1,870,788	0	2,606,413	4,755,005
1,991,038	0	2,516,687	3,210,644
10,693,976	0	14,268,106	7,594,194
2,080,378	0	3,030,475	580,866
48,752,573	0	63,242,820	14,022,652
0	0	47,000	0
0	0	803,127	759,989
3,374,562	0	4,515,550	5,579,823
2,094,528	0	3,562,553	3,188,808
6,414,210	0	9,371,882	8,173,723
0	0	642,008	1,623,218
29,658,322	0	36,717,563	31,830,678
18,174,995	0	20,048,284	66,617,485
2,006,000	0	2,006,000	1,066,973
143,388	0	143,388	825,979
6,256,699	0	6,256,699	7,671,378
\$192,570,939	\$333,725	\$258,356,152	\$238,153,436



1993 Grant Appropriations



Grant Appropriations 1978-1993

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- 1. COAL PRODUCTION:** Under Section 402 of Public Law 95-87 (SMCRA), coal operators are required to pay a fee when coal is sold, used, or transferred. These fees are deposited in the U.S. Treasury as the Abandoned Mine Land Fund. Information about the type of coal (bituminous, lignite, or underground) and tonnage are tabulated on Form OSM-1 and submitted with the fee, which is paid quarterly to the Office of Surface Mining. The coal production data presented in this report was compiled from information stored in the Office of Surface Mining Fee Collection System computer data base. Collection of the fee began with the last quarter of 1977; therefore, 1978 data includes the last quarter of 1977 and the first three quarters of 1978. Information for each successive year follows the same tabulation pattern. Surface production includes both bituminous and lignite coal; underground includes tonnage reported as underground mined. In Montana and New Mexico, coal production on Indian land is listed under the Crow, Hopi, and Navajo Tribes.
- 2. NUMBER OF MINES:** The number of mines was compiled from Office of Surface Mining Fee Collection System data described in footnote 1 above. Annual totals were calculated by adding together the number of operations with the same Mine Safety and Health Administration numbers reported each quarter and dividing by four to give an annual number in each state.
- 3. ACREAGE OF PERMITS ISSUED AND BONDS RELEASED:** Acreage permitted data was compiled from annual oversight reports developed by Office of Surface Mining field offices. The acreage listed was permitted during the year shown and is not the total acreage under permit during that year. The acreage of reclamation bonds released was also compiled from the annual oversight reports. It should be noted that the sum of final Interim Regulatory Program bonds and Phase III (or final release) bonds equals the acreage where reclamation is complete (and has been released by the regulatory authority). The sum of all bond releases will result in duplication of acreage since the same land can be released under Phase I, II, and III. Note: state and federal permits are reported in this table.
- 4. STATE AND FEDERAL ENFORCEMENT ACTIONS:** Enforcement action data was compiled from annual oversight reports and field office records. The data presented are all actions taken by both the state regulatory authority and the Office of Surface Mining. Because the Hopi and Navajo jurisdictions overlap in Arizona and New Mexico, enforcement actions data for the tribes have been combined in annual oversight reports prepared by the Albuquerque Field Office; therefore, they are combined for this report and listed under Hopi Tribe.
- 5. ABANDONED MINE LAND RECLAMATION (PRIORITY 1 & 2 ACCOMPLISHMENTS):** Beginning in March 1993, the single source of Abandoned Mine Land accomplishments was the Abandoned Mine Land Inventory System (AMLIS) which represents OSM's official source for quantification of the number of problems and reclamation accomplishments. Statistics used in this table show Priority 1 and 2 projects. Priority 1 and 2 are specified in Section 403(1) and (2) of SMCRA and are as follows: Priority 1 - protection of public health, safety, and general welfare, and property from extreme danger of adverse effects of coal mining practices, and Priority 2 - protection of public health, safety, and general welfare from adverse effects of coal mining practices.
- 6. RURAL ABANDONED MINE PROGRAM (RAMP) RECLAMATION (PRIORITY 1 & 2 ACCOMPLISHMENTS):** The Rural Abandoned Mine Land Program, SMCRA Section 406, is administered by the Secretary of Agriculture. Data used to compile this table was collected under the same criteria as described in footnote 5 above.
- 7. ABANDONED MINE LAND RECLAMATION (PRIORITY 3 ACCOMPLISHMENTS):** Priority 3 accomplishments are those described in SMCRA Section 403(3), the restoration of land and water resources and the environment previously degraded by adverse effects of coal mining practices including measures for the conservation and development of soil, water (excluding channelization), woodland, fish and wildlife, recreation resources, and agricultural productivity. Data used to compile this table were collected using the same criteria as described in footnote 5 above.
- 8. RURAL ABANDONED MINE PROGRAM (RAMP) RECLAMATION (PRIORITY 3 ACCOMPLISHMENTS):** See footnotes 5, 6, and 7.
- 9. PROGRAM FUNDING:** Source of information, OSM Division of Financial Management, Denver, Colorado.

PHOTOGRAPHIC CREDIT: Front cover: Chuck Meyers, Office of Surface Mining.