

An update on Abandoned Mine Land Reclamation of resources affected by mining that took place before the Surface Mining Law was passed in 1977.

Title IV of SMCRA — the Abandoned Mine Land Reclamation Program — provides for the restoration of lands mined and abandoned or left inadequately restored before August 3, 1977. Implementation is accomplished through an Emergency Program (problems having a sudden danger that presents a high probability of substantial harm to the health, safety, or general welfare of people before the danger can be abated under normal program operating procedures) and a non-emergency program. Just as in the regulatory programs, states and tribes with approved programs carry out these responsibilities.

Fund Management

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 the reclamation costs of abandoned mine land reclamation projects. The fund consists of fees, contributions, late payment interest, penalties, administrative charges, and interest earned on investment of the fund's principal. From January 30, 1978, when the first fees were paid, through September 30, 1996, the fund collections total \$4,408,918,411.

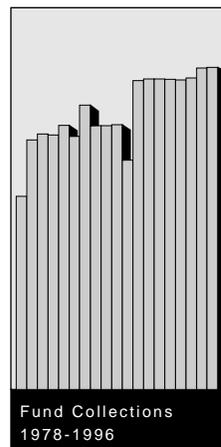
Expenditures from the fund are made through the regular budgetary and appropriation process. SMCRA specifies that 50 percent of the reclamation fees collected in each state with an approved reclama-

tion program, or within Indian lands where the tribe has an approved reclamation program, are to be allocated to that state or tribe. This 50 percent is designated as the state or tribal share of the fund. The remaining 50 percent (the federal share) is used by the Office of Surface Mining to complete high priority and emergency projects under its Federal Reclamation Program, to fund the Small Operator Assistance Program (SOAP), to fund projects

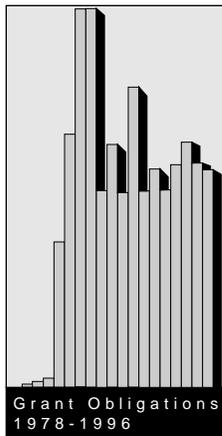
directly through state reclamation programs, and to pay audit and administrative costs. In 1991, at the direction of Congress, a formula to distribute federal-share money to the state reclamation programs was established based on historic coal production. Table 9 shows collections and funding by states for 1996.

The Abandoned Mine Reclamation Act of 1990 (Public Law 101-508) extended fee collection authority through September 30, 1995; the Energy Policy Act of 1992 (Public Law 102-468) further extended fee collection authority until September 30, 2004.

In 1992, under authority of Public Law 101-508, the Office of Surface Mining began investing abandoned mine land funds. By law,



the Office of Surface Mining 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 for 1996 were \$81.53 million. The average interest earned during the year was 5.07 percent. At the end of the year, the Office of Surface Mining had more than \$1.4 billion invested in Treasury securities. 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 Abandoned Mine Reclamation Fund to the United Mine Workers Association Combined Benefits Fund, beginning in 1996. On September 30, 1996, \$154.65 million was available for transfer. At the beginning of 1996, \$47.18 million was transferred to the United Mine Workers Association Combined Benefits Fund from 1996 future earnings.

Grants to States and Tribes

Beginning with Texas in 1980, the Office of Surface Mining began approving state reclamation programs. Currently, all primacy states except Mississippi have approved abandoned mine land reclamation programs. During 1988, the Navajo and Hopi Tribe programs were approved, and in 1989 the Crow Tribe received approval for its program. In 1996, the states and the tribes received grants totaling \$179,690,736.

Since 1979, when the states began receiving abandoned mine land administrative grants to operate their programs and construction grants to complete reclamation projects, \$2,342,557,493 has been distributed from the fund. State grants for administration cost, set-aside and subsidence insurance programs, emergency programs, initial program development, and cooperative agreement costs have been reduced to less

than 25 percent of the total grant cost during the last three years. The 1979-1996 net grant awards for abandoned mine land construction projects totaled \$1.6 billion, and construction obligations at the state/tribe level totaled \$1.5 billion. Grant amounts for 1996 are shown in Table 10. On-the-ground coal mine reclamation accomplishments resulting from grant funding through 1996 are included in Table 13.

Simplified grant funding of state abandoned mine land programs started in 1994. This grant application process eliminates the requirement for advance approval of each reclamation project before a grant is awarded to the state. States receive amounts based on appropriated spending levels and are held accountable for using those funds in accordance with their approved abandoned mine land plan. The Office of Surface Mining is no longer involved in cumbersome and

**TABLE 9
ABANDONED MINE LAND FEE COLLECTIONS AND FUNDING
1996**

State/Tribe	AML Collections	State Share Distribution ¹	Federal Share Distribution ¹	Emergency Distribution ¹	Total Distribution ¹
Alabama	\$5,115,521	\$1,705,118	\$1,496,757	\$300,000	\$3,501,875
Alaska	577,672	160,299	1,339,701	25,000	1,525,000
Arkansas	10,142	0	1,500,000	13,000	1,513,000
Colorado	5,312,410	1,450,755	729,443	0	2,180,198
Illinois	8,664,942	3,140,430	5,544,952	561,000	9,246,382
Indiana	8,705,557	2,964,639	1,805,263	310,000	5,079,902
Iowa	0	10,962	1,489,038	0	1,500,000
Kansas	92,816	51,836	1,448,164	460,000	1,960,000
Kentucky	33,984,114	10,605,088	5,434,405	0	16,039,493
Louisiana	326,045	95,104	0	0	95,104
Maryland	649,442	223,867	1,276,133	0	1,500,000
Missouri	180,471	179,889	1,320,111	0	1,500,000
Montana	11,323,212	3,627,014	0	125,000	3,752,014
New Mexico	5,052,884	1,337,663	177,337	0	1,515,000
North Dakota	2,973,670	920,265	579,735	50,000	1,550,000
Ohio	6,304,505	2,286,694	3,399,127	1,700,000	7,385,821
Oklahoma	715,510	184,939	1,315,061	0	1,500,000
Pennsylvania	12,847,303	4,111,233	17,924,037	0	22,035,270
Tennessee	832,757	0	0	0	0
Texas	5,622,674	1,557,077	0	0	1,557,077
Utah	3,971,141	958,370	541,630	0	1,500,000
Virginia	7,111,431	2,338,426	1,667,989	350,000	4,356,415
Washington	1,617,617	0	0	0	0
West Virginia	34,876,130	9,382,801	10,301,317	4,350,000	24,034,118
Wyoming	90,424,305	20,953,653	0	0	20,953,653
Crow Tribe	1,571,234	467,445	0	0	467,445
Hopi Tribe	1,265,686	449,522	0	0	449,522
Navajo Tribe	6,262,389	3,302,711	0	0	3,302,711
Total	\$256,391,580	\$72,465,800	\$59,290,200	\$8,244,000	\$140,000,000

1. "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, Program Support and as approved during the year by the Deputy Director.

detailed pre-award scrutiny of state grant applications.

Minimum Program

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

During 1996, Alaska, Arkansas, Iowa, Kansas, Maryland, Missouri, North Dakota, Oklahoma, and Utah were eligible for

minimum level program funding and received such grants during the year. Minimum-level program funding remained at \$1,500,000 for 1996. Eligible states received \$7,769,571 that was deducted from non-minimum program states and tribes for federal-share money in 1996. These amounts bring the 10 states to the minimum program level. Once minimum program states and tribes complete their high priority projects listed in the National Inventory of

Abandoned Mine Land Problems, annual grants are limited to state share funds.

State Set-Aside

Beginning in 1987, Public Law 100-34 authorized states to set aside up to 10 percent of the state-share portion of their annual abandoned mine land 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 abandoned mine land

problems after August 3, 1992, the original expiration date for the collection of abandoned mine land reclamation fees. (Subsequent legislation has extended this date to September 30, 2004.) Statutory amendments contained in Public Law 101-508 created a new set-aside program that does not supersede the transfer of funds deposited under the original 1987 program. The funds set aside under the new program were available for use beginning in 1996, and only to reclaim eligible priority 1 and 2 abandoned coal mine land problems. In 1996, ten states set aside \$5,825,475.

Subsidence Insurance

Public Law 98-473 authorized states and tribes with approved reclamation programs to use abandoned mine land funds to establish 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 abandoned mine land fund. In 1996, one subsidence insurance grant was issued to Wyoming in the amount of \$120,000. Through 1996,

TABLE 10
ABANDONED MINE LAND GRANTS* TO PRIMACY STATES AND INDIAN TRIBES
1996

State/Tribe	Subsidence Insurance	10% Program Set-Aside	Administration ³	Project Costs ⁴	Emergency ⁵	1996 Total	1995 Total
Alabama	\$0	\$0	\$639,777	\$3,033,204	\$300,000	\$3,972,981	\$3,822,767
Alaska	0	0	401,712	2,238,280	25,000	2,664,992	1,548,400
Arkansas	0	0	371,645	1,650,479	13,000	2,035,124	1,757,474
Colorado	0	218,020	583,600	1,367,100	0	2,168,720	2,240,000
Illinois	0	0	1,233,397	7,681,985	561,000	9,476,382	9,713,411
Indiana	0	476,990	1,024,594	4,940,010	310,000	6,751,594	8,884,694
Iowa	0	0	296,170	1,258,118	0	1,554,288	1,557,604
Kansas	0	0	153,949	1,406,971	460,000	2,020,920	2,400,232
Kentucky	0	0	1,136,706	15,150,174	0	16,286,880	15,919,624
Louisiana	0	0	123,053	62,850	0	185,903	89,066
Maryland ¹	0	20,897	541,785	0	0	562,682	2,971,189
Missouri	0	67,764	538,601	1,582,570	0	2,188,935	2,158,510
Montana	0	0	495,227	3,167,761	125,000	3,787,988	6,862,720
New Mexico	0	151,500	1,186,296	1,013,700	0	2,351,496	1,642,602
North Dakota	0	118,365	244,757	1,404,023	50,000	1,817,145	2,344,679
Ohio ¹	0	500,000	2,336,865	3,444,000	1,700,000	7,980,865	9,643,442
Oklahoma	0	0	283,992	1,244,809	0	1,528,801	1,541,399
Pennsylvania ¹	0	2,203,527	6,092,214	30,382,590	0	38,678,331	25,038,164
Texas	0	0	439,226	0	0	439,226	299,120
Utah	0	0	272,668	1,307,163	0	1,579,831	1,960,770
Virginia ¹²	0	100,000	1,492,219	4,473,856	830,000	6,896,075	5,575,644
West Virginia ¹	0	1,968,412	8,460,372	23,846,479	4,350,000	38,625,263	31,569,726
Wyoming	120,000	0	414,206	21,614,161	0	22,148,367	19,819,162
Crow Tribe	0	0	145,551	967,658	0	1,113,209	671,168
Hopi Tribe	0	0	241,606	0	0	241,606	191,860
Navajo Tribe	0	0	706,185	1,926,947	0	2,633,132	2,263,813
Total	\$120,000	\$5,825,475	\$29,856,373	\$135,164,888	\$8,724,000	\$179,690,736	\$162,487,240

* Funding for these grants is derived from the 1996 Distribution and funds recovered or carried over from previous years. Downward adjustments of prior-year awards are not included in the totals.

(1) These 10% set-aside amounts are for Acid Mine Drainage set-aside funding rather than Future set-aside funding.

(2) Administrative amount for Virginia includes \$154,925 for coalbed mapping grant.

(3) Administrative amounts for most 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.

(4) The term "Project Costs" is now used instead of Construction. AML simplified grants do not contain specific construction cost breakouts, but rather list all cost associated with a construction project as a project cost. This category contains both non-water supply and water supply project costs.

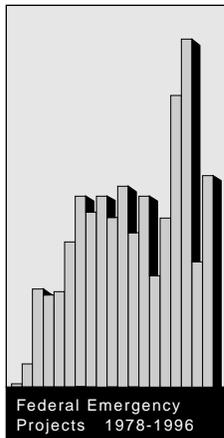
(5) This category contains emergency project, administrative, and indirect costs. Indirect costs are not directly attributable to either emergency project or administrative costs.

the Office of Surface Mining has granted a total of \$11,299,247 to Colorado, Indiana, Kentucky, Ohio, West Virginia, and Wyoming for this purpose. This figure represents a net decrease from 1995 due to a \$520,000 return by Ohio per state law.

Emergency Program

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 401(a) of SMCRA, the Secretary of the Interior is authorized to spend money from the



Abandoned Mine Reclamation Fund for the emergency restoration, reclamation, abatement, control, or prevention of the effects of coal mining practices. In 1996 \$25.2 million was spent abating over 400 Abandoned Mine Land emergencies in 16 states. Most emergencies occurred

in Pennsylvania, followed by West Virginia, Ohio, Kentucky, and Kansas. The greatest amount of emergency funding was spent in Kentucky, reflecting the large number of landslides which have a high abatement cost.

Table 11 summarizes emergency projects by states and tribes.

Following passage of the Surface Mining Law, the Office of Surface Mining did all emergency reclamation; however, as the state and Tribal programs were approved, many took over emergency

	1996 Projects		1978-1995 Projects		Total
	Federal	State	Federal	State	
Alabama	0	9	10	6	25
Arkansas	0	0	1	6	7
California	0	0	3	0	3
Colorado	3	0	87	0	90
Illinois	0	17	51	150	218
Indiana	0	18	94	24	136
Iowa	2	0	13	0	15
Kansas	0	23	270	316	609
Kentucky	34	0	587	0	621
Maryland	3	0	8	0	11
Michigan	0	0	9	0	9
Missouri	0	0	6	0	6
Montana	0	1	7	10	17
Navajo Tribe	0	0	6	0	6
New Mexico	0	0	15	0	15
North Dakota	0	1	15	2	18
Northern Cheyenne Tribe	0	0	2	0	2
Ohio	0	35	190	78	303
Oklahoma	2	0	41	0	43
Pennsylvania					
Anthracite	105	0	777	0	882
Bituminous	72	0	557	0	629
Subtotal	177	0	1,334	0	1,511
Rhode Island	0	0	1	0	1
Southern Ute Tribe	0	0	1	0	1
Tennessee	0	0	11	0	11
Texas	0	0	5	0	5
Virginia	0	6	30	47	83
Washington	5	0	33	0	38
West Virginia		64	179	308	551
Wyoming	1	0	37	0	38
Total	227	174	3,046	947	4,393

programs. 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 emergency responsibility in 1990, followed by Ohio in 1992, Alaska and North Dakota in 1993, and Indiana in 1994. In 1989, the Office of Surface Mining established a policy that provided federal share funds (in addition to formula-based allocations) to states and tribes with emergency programs.

The Office of Surface Mining spent \$20.1 million on emergency reclamation projects in 1996. States spent \$5.1 million on emergency reclamation projects in 1996.

Kentucky and Pennsylvania continue to lead the nation in obligations of emergency



Acid mine drainage destroys vegetation and impacts downstream areas many miles from the pollution source.

**TABLE 12
FEDERAL RECLAMATION PROGRAM PROJECTS
1996 OBLIGATIONS**

	Emergency	High Priority	Total 1978-95*	Total Emergency Prior Year Adj in 1996*	Total High Priority Prior Year Adj in 1996*	Total 1978-96*
Alabama	\$0	\$0	\$13,934,015	\$0	\$0	\$13,934,015
Alaska	0	0	194,638	0	0	194,638
Arkansas	0	0	84,904	0	0	84,904
California	0	0	1,100,049	0	10	1,100,059
Colorado	34,514	0	1,864,098	0	0	1,898,612
Georgia	0	513,086	2,609,126	0	0	3,122,212
Illinois	0	0	5,376,749	0	0	5,376,749
Indiana	0	0	4,032,023	0	0	4,032,023
Iowa	11,140	0	1,084,065	0	0	1,095,205
Kansas	0	0	5,094,172	0	0	5,094,172
Kentucky	3,728,636	0	81,156,444	(794,338)	0	84,090,742
Maryland	40,670	0	2,626,938	0	0	2,667,608
Michigan	0	37,500	2,019,754	0	0	2,057,254
Missouri	1,829	0	8,033,948	(19,868)	0	8,015,909
Montana	0	0	729,058	0	0	729,058
New Mexico	0	0	2,364,696	0	0	2,364,696
North Carolina	0	0	205,407	0	0	205,407
North Dakota	0	0	1,723,933	0	0	1,723,933
Ohio	0	0	18,415,430	(4,463)	0	18,410,967
Oklahoma	1,320	0	1,214,350	0	0	1,215,670
Oregon	0	0	42,275	0	0	42,275
Pennsylvania	3,094,573	15,000	91,441,862	(255,001)	0	94,296,434
Rhode Island	0	0	556,229	0	0	556,229
South Dakota	0	0	27,255	0	0	27,255
Tennessee	0	919,000	17,028,837	0	(89,992)	17,857,845
Texas	0	0	287,849	0	0	287,849
Utah	0	0	123,791	0	0	123,791
Virginia	0	0	10,139,469	0	0	10,139,469
Washington	325,860	305,569	5,461,518	0	(641)	6,092,306
West Virginia	0	0	29,023,226	0	0	29,023,226
Wyoming	0	0	1,067,101	0	0	1,067,101
Cheyenne River Sioux Tribe	0	0	2,812,372	0	0	2,812,372
Crow Tribe	0	0	1,097,895	0	0	1,097,895
Fort Berthold Tribe	0	0	69,972	0	0	69,972
Fort Peck Tribe	0	0	147,991	0	0	147,991
Hopi Tribe	0	0	1,263,409	0	0	1,263,409
Jacarillo Apache Tribe	0	0	50,998	0	0	50,998
Navajo Tribe	0	0	2,222,792	0	0	2,222,792
Northern Cheyenne Tribe	0	0	584,997	0	47	585,044
Southern Ute Tribe	0	0	94,206	0	0	94,206
Rocky Boy Tribe	0	0	60,188	0	0	60,188
Uintah/Ouray Tribe	0	0	138,738	0	0	138,738
Ute Mountain Tribe	0	0	14,300	0	0	14,300
Ute Mountain Apache Tribe	0	0	1,838	0	0	1,838
Wind River Tribe	0	0	73,267	0	0	73,267
Zuni Tribe	0	0	125,009	0	0	125,009
Undistributed	2,000	0	0	0	0	2,000
Total	\$7,240,542	\$1,790,155	\$317,821,181	(\$1,073,670)	(\$90,576)	\$325,687,632

* Includes prior year contract deobligations and upward adjustments.

funding. Eastern Pennsylvania had heavy rains and snowfall during the winter of 1995-96, which elevated the mine pools in the anthracite coalfields and produced record numbers of emergency subsidence problems. Kentucky experienced a relatively dry year in 1996, resulting in fewer landslide emergencies than in previous years.

Of the 637 potential emergencies referred by Office of Surface Mining field offices, 214 resulted in a declaration of emergency, 85 were determined to be not of an emergency nature, 303 were considered not related to coal mining or were reclaimed by the landowner, and 35 were still under investigation at the close of the fiscal year on September 30, 1996. Non-emergency mining-related complaints were referred to the states for consideration as high-priority abandoned mine land grant projects.

Non-Emergency Program

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 problems that present an extreme danger to the public. A non-emergency 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 1980, when states and Indian tribes began to receive approval of their abandoned mine land programs, all reclamation was administered by the Office of Surface Mining. However, as state and tribal programs were approved and the states and tribes assumed responsibility for correcting abandoned mine land problems, the Office of Surface Mining has greatly reduced its direct participation in the non-emergency portion of the program and during 1996 completed non-emergency projects in Georgia, Michigan, Tennessee, and Washington.

Table 13 summarizes emergency and non-emergency abandoned coal mine reclamation project accomplishments through 1996.

The Abandoned Mine Land Fund also is used to reclaim some problems created by non-coal mines. To be eligible for funding a non-coal project must be a Priority 1 (threat to health and safety) or the state or Indian tribe must certify it has addressed all known coal related problems. Non-coal reclamation project accomplishments are shown in Table 14.

Post-SMCRA Reclamation

As authorized in the 1996 appropriations, federal civil penalties collected under Section 518 of SMCRA were used to reclaim lands mined and abandoned after August 3, 1977. In 1996, the Office of Surface Mining funded eight reclamation projects costing a total of \$548,216 in Georgia and Kentucky. An additional \$308,403 in unobligated funds will be carried over for use in 1997 reclamation projects.

Appalachian Clean Streams Initiative

The Appalachian Clean Streams Initiative was started in the fall of 1994 by the Office of Surface Mining with the intent of developing remediation clean-up strategies to reduce and eliminate acid mine drainage from the Nation's streams. The principal source of acid mine drainage pollution in Appalachia is abandoned coal mines. Because of the extent and high reclamation cost of the pollution, this problem cannot be eliminated by any single government agency or group. As a result, the Clean Streams Initiative is designed to facilitate development of partnerships. Through this effort,

the Office of Surface Mining has partnered with over 100 government agencies, private watershed groups, environmental groups, private foundations, coal producers, and private individuals representing a strong beginning for the Clean Streams Initiative. Building on this foundation the FY 1997 appropriation is providing “seed-money” for 13 acid mine drainage clean-up projects in nine states. In addition, during 1996, Congress provided authority through the Interior Department's appropriation to allow states to use Abandoned Mine Lands grant money to match other funds committed to acid mine drainage projects. This will ensure



Early Spring seeding on a reclaimed burning refuse pile in Eastern Pennsylvania.

TABLE 13
ABANDONED MINE LAND COAL RECLAMATION ACCOMPLISHMENTS
 PRIORITY 1 & 2 (Protection of Public Health, Safety, and General Welfare) and Emergency Projects
 1978-1996

	Clogged Streams ¹	Clogged Streams Lands ²	Highwalls ³	Impoundments ⁴	Piles & Embankments ²	Slides ²	Gases ⁴	Equipment & Facilities ⁴	Water Bodies ⁴	Industrial/Residential Waste ²	Portals ⁴	Polluted Water: Ag./Ind. ⁴	Polluted Water: Human Consumption ⁴	Subsidence ²	Surface Burning ²	Underground Mine Fires ²	Vertical Openings ⁴
Alabama	2	117	129,490	2	35	8	0	446	47	22	891	0	12	11	50	0	282
	(3.2)	(47.3)	(39,460.1)		(14.1)	(3.2)				(8.9)				(4.4)	(20.2)		
Alaska	0	0	960	3	8	0	0	57	0	3	6	0	0	0	0	0	5
			(292.5)		(3.2)					(1.2)							
Arkansas	1	0	38,406	0	164	0	0	1	37	12	6	0	0	3	2	0	65
	(1.6)		(11,703.6)		(66.3)					(4.8)				(1.2)	(.8)		
California	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	38
CERT*	0	0	7,170	456	19	0	0	6	30	9	71	0	0	34	0	0	17
			(2,184.9)		(7.6)					(3.6)				(13.7)			
Colorado	0	0	51,493	0	7	0	0	1	0	2	500	3	0	46	31	115	272
			(15,691.7)		(2.8)					(.8)				(18.6)	(12.5)	(46.5)	
Crow	0	0	670	1	35	22	0	2	0	0	8	1	0	16	0	0	4
			(204.1)		(14.1)	(8.9)								(6.4)			
Georgia	0	0	4,100	3	3	0	0	0	0	0	85	0	1	0	0	0	8
			(1,249.4)		(1.2)												
Hopi	0	0	14,302	0	0	0	0	8	0	0	9	0	0	0	0	2	2
			(4,358.3)													(.8)	
Illinois	14	714	15,685	6	128	2	9	224	2	42	111	11	0	17	17	0	410
	(22.5)	(288.9)	(4,779.7)		(51.8)	(.8)				(16.9)				(6.8)	(6.8)		
Indiana	14	106	89,775	5	484	1	3	85	2	22	42	6	6	36	5	0	251
	(22.5)	(42.8)	(27,357.5)		(195.8)	(.4)				(8.9)				(14.5)	(2.0)		
Iowa	4	245	46,035	1	710	0	0	4	20	2	1	12	1	1	0	0	17
	(6.4)	(99.1)	(14,028.4)		(287.3)					(.8)				(.4)			
Kansas	0	1	72,921	1	104	1	0	2	2	13	0	3	0	31	3	0	8
		(.4)	(22,221.5)		(42.0)	(.4)				(5.2)				(12.5)	(1.2)		
Kentucky	35	8,060	16,169	87	254	1,674	0	148	12	49	1,179	5	3,001	63	208	83	67
	(56.3)	(3,261.7)	(4,927.2)		(102.7)	(677.4)				(19.8)				(25.4)	(84.1)	(33.5)	
Maryland	3	41	26,680	0	99	17	0	12	9	15	17	3	1	9	0	0	2
	(4.8)	(16.5)	(8,130.3)		(40.0)	(6.8)				(6.0)				(3.6)			
Michigan	0	0	950	0	0	0	0	4	2	0	0	0	0	0	8	0	11
			(289.4)												(3.2)		
Missouri	11	1,392	53,712	6	352	0	0	27	10	70	17	30	15	2	19	2	51
	(17.6)	(563.3)	(16,367.9)		(142.4)					(28.3)				(.8)	(7.6)	(.8)	
Montana	3	2	5,650	3	62	1	0	182	0	74	718	17	12	473	302	69	430
	(4.8)	(.8)	(1,721.7)		(25.0)	(.4)				(29.9)				(191.4)	(122.2)	(27.9)	
Navajo	0	0	0	1	1	7	0	4	0	0	152	0	0	5	3	0	7
				(.4)	(2.8)									(2.0)	(1.2)		
N.Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
N.Dakota	0	0	43,049	4	303	35	0	14	18	2	13	6	0	1,158	1	0	88
			(13,118.5)		(122.6)	(14.1)				(.8)				(468.6)	(.4)		
New Mexico	0	0	0	0	2	0	0	13	0	0	225	1	1	29	35	32	80
					(.8)									(11.7)	(14.1)	(12.9)	
Ohio	13	4,503	28,607	5	96	307	0	39	4	34	146	0	3	42	73	0	135
	(20.9)	(1,822.3)	(8,717.5)		(38.8)	(124.2)				(13.7)				(16.9)	(29.5)		
Oklahoma	1	0	170,194	0	0	0	0	13	151	6	101	3	2	5	0	0	74
	(1.6)		(51,864.0)							(2.4)				(2.0)			
Oregon	0	0	0	0	0	0	0	3	0	0	12	0	0	0	0	0	3
Pennsylvania	29	43	444,291	42	469	21	0	286	81	24	212	1	8	2,247	124	815	356
	(46.6)	(17.4)	(135,390.9)		(189.7)	(8.4)				(9.7)				(909.3)	(50.1)	(329.8)	
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
														(2.4)			
S. Dakota	0	0	135	0	0	0	0	4	0	0	5	0	0	1	0	0	1
			(41.1)											(.4)			
Tennessee	0	147	16,255	0	200	46	0	25	9	11	187	0	5	6	28	0	10
		(59.4)	(4,953.4)		(80.9)	(18.6)				(4.4)				(2.4)	(11.3)		
Texas	0	0	3,285	0	987	0	0	0	0	0	6	0	0	0	0	0	19
			(1,001.0)		(399.4)												
Utah	14	9	2,925	1	115	0	19	146	0	2	497	2	0	5	39	19	23
	(22.5)	(3.6)	(891.3)		(46.5)					(.8)				(2.0)	(15.7)	(7.6)	
Virginia	59	776	8,268	14	231	189	0	191	1	2	638	0	90	5	27	0	86
	(94.9)	(314.0)	(2,519.5)		(93.4)	(76.4)				(.8)				(2.0)	(10.9)	(0)	
Washington	0	0	0	0	3	0	0	4	0	0	24	0	0	6	15	0	56
					(1.2)									(2.4)	(6.0)		
W. Virginia	36	149	138,713	178	2,492	353	3	292	1	29	1,443	10	333	202	312	18	80
	(57.9)	(60.2)	(42,270.6)		(1,008.4)	(142.8)				(11.7)				(81.7)	(126.2)	(7.2)	
Wyoming	1	0	9,011	1	500	0	0	15	0	1	186	0	0	278	9	92	187
	(1.6)		(2,745.9)		(202.3)					(.4)				(112.5)	(3.6)	(37.2)	
Total (1996)	240	16,305	1,438,901	820	7,863	2,684	34	2,258	438	446	7,533	114	3,491	4,737	1,311	1,247	3,150
	(385.7)	(6,597.7)	(438,481.9)		(3,180.7)	(1,085.6)				(179.8)				(1,916.0)	(529.6)	(504.2)	
Total (1995)	215	15,647	1,272,745	317	7,831	2,478	33	2,074	369	401	7,154	99	3,052	4,431	1,259	1,221	2,944
	(345.9)	(6,332.1)	(387,849.7)		(3,169.1)	(1,002.8)				(162.2)				(1,793.1)	(509.5)	(494.1)	

TABLE 13 (continued)
ABANDONED MINE LAND COAL RECLAMATION ACCOMPLISHMENTS
PRIORITY 3 (Environmental Restoration)
1978-1996

	Bench ²	Industrial/Residential Waste ²	Equipment & Facilities ⁴	Go ³	Highwall ³	Haul Road ³	Mine Opening ⁴	Pit ³	Spoil Area ²	Slurry ²	Slump ²	Water ⁵	
	23	10	8	186	24,175	2	45	0	9,154	8	8	329	Alabama
	(9.3)	(4.0)		(75.2)	(7,366.9)	(.8)			(3,704.5)	(3.2)	(3.2)	(1,245.4)	Alaska
	0	0	0	7	0	0	0	0	0	9	25	0	Arkansas
				(2.8)						(3.6)	(10.1)		
	0	0	0	0	0	0	0	0	0	0	0	0	California
	0	0	2	4	1,500	0	1	7	80	0	0	0	CERT*
				(1.6)	(457.1)			(2.8)	(32.3)				
	3	5	7	102	2,028	0	18	83	829	0	0	1	Colorado
	(1.2)	(2.0)		(41.2)	(618.0)			(33.5)	(335.4)			(3.8)	
	2	0	0	21	1,980	12	1	7	23	0	2	0	Crow
	(.8)			(8.4)	(603.3)	(4.8)		(2.8)	(9.3)		(.8)		
	0	0	0	3	0	0	2	0	0	0	0	0	Georgia
				(1.2)									
	0	0	0	25	551	15	0	10	10	0	0	0	Hopi
				(10.1)	(167.9)	(6.0)		(4.0)	(4.0)				
	1	13	97	2,272	4,510	140	90	386	1,847	1,033	1	365	Illinois
	(.4)	(5.2)		(919.4)	(1,374.3)	(56.6)		(156.2)	(747.4)	(418.0)	(.4)	(1,381.7)	
	0	52	103	985	4,330	32	18	55	1,061	382	2	69	Indiana
		(21.0)		(398.6)	(1,319.5)	(12.9)		(22.2)	(429.3)	(154.5)	(.8)	(261.2)	
	0	0	0	1	0	5	1	19	440	0	0	0	Iowa
				(.4)		(2.0)		(7.6)	(178.0)				
	0	0	1	89	5,100	0	0	17	273	10	0	0	Kansas
				(36.0)	(1,554.1)			(6.8)	(110.4)	(4.0)			
	619	0	51	197	2,000	0	68	3	997	58	10	0	Kentucky
	(250.5)			(79.7)	(609.4)			(1.2)	(403.4)	(23.4)	(4.0)		
	0	0	1	21	3,650	1	0	0	212	0	1	70	Maryland
				(8.4)	(1,112.2)	(.4)			(85.7)		(.4)	(265.0)	
	0	0	1	18	0	1	0	1	10	0	11	0	Michigan
				(7.2)		(.4)		(.4)	(4.0)		(4.4)		
	0	3	4	129	9,624	1	0	70	1,233	69	0	86	Missouri
		(1.2)		(52.2)	(2,932.7)	(.4)		(28.3)	(498.9)	(27.9)		(325.5)	
	1	76	58	146	1,170	1	42	18	842	0	19	241	Montana
	(.4)	(30.7)		(59.0)	(356.5)	(.4)		(7.2)	(340.7)		(7.6)	(912.3)	
	1	1	2	112	0	10	43	17	164	0	0	0	Navajo
	(.4)	(.4)		(45.3)		(4.0)		(6.8)	(66.3)				
	0	0	0	0	0	0	0	0	0	0	0	0	N. Carolina
	0	0	0	0	0	0	0	0	0	0	0	0	N. Dakota
	2	0	11	44	0	6	4	2	2	2	0	0	N. Mexico
	(.8)			(17.8)		(2.4)		(.8)	(.8)	(.8)			
	0	0	3	68	9,220	0	19	17	382	0	0	0	Ohio
				(27.5)	(2,809.6)			(6.8)	(154.5)				
	0	0	0	0	0	0	0	0	0	0	0	0	Oklahoma
	0	0	0	0	0	0	1	0	0	0	0	0	Oregon
	0	0	21	34	5,108	0	17	78	1,084	1	26	90,306	Pennsylvania
				(13.7)	(1,556.5)			(31.5)	(438.6)	(.4)	(10.5)	(341,845.4)	
	0	0	0	0	0	0	0	0	0	0	0	0	Rhode Island
	0	0	0	0	0	0	0	0	0	0	0	0	S. Dakota
	76	0	15	52	130	8	0	47	325	0	3	360	Tennessee
	(30.7)			(21.0)	(39.6)	(3.2)		(19.0)	(131.5)		(1.2)	(1,362.7)	
	0	0	0	8	0	0	0	0	152	0	0	0	Texas
				(3.2)					(61.5)				
	4	7	63	248	550	3	0	8	55	1	16	20	Utah
	(1.6)	(2.8)		(100.3)	(167.6)	(1.2)		(3.2)	(22.2)	(.4)	(6.4)	(75.7)	
	0	1	21	13	0	1	21	0	3	0	0	20	Virginia
		(.4)		(5.2)		(.4)			(1.2)			(75.7)	
	0	0	0	0	0	0	0	0	0	0	0	0	Washington
	0	0	0	5	15,040	0	1	5	9	0	0	602	W. Virginia
				(2.0)	(4,583.2)			(2.0)	(3.6)			(2,278.8)	
	0	11	3	30	1,300	1	4	10	386	0	0	400,002	Wyoming
		(4.4)		(12.1)	(396.1)	(.4)		(4.0)	(156.2)			(1,514,172.3)	
	732	179	472	4,820	91,966	239	396	860	19,573	1,573	124	492,471	TOTAL (1996)
	(296.1)	(72.1)		(1,949.5)	(28,024.5)	(96.3)		(347.1)	(7,919.7)	(636.2)	(49.8)	(1,864,205.5)	
	720	179	458	4,713	84,726	188	391	789	18,088	1,628	125	491,819	TOTAL (1995)
	(291.3)	(72.4)		(1,907.2)	(25,818.9)	(76.0)		(319.2)	(7,319.9)	(658.8)	(50.5)	(1,861,737.5)	

KEY

CERT* is the Council of Energy Resources Tribes, and includes: Blackfeet; Cheyenne River Sioux; Mandan, Hidatsa, and Arikara (For Berthold); Assiniboin and Sioux (Fort Peck); Northern Cheyenne; Jicarilla Apache; Laguna Pueblo; Chippewa and Cree (Rocky Boys); San Carlos Apache; Southern Ute; Ute Mountain Ute; White Mountain Apache; and Arapaho and Shoshone (Wind River).

Units of Measure:

1. Miles (Kilometers)(1.609)
2. Acres (Hectars)(.404687904687905)
3. Feet (Meters)(.304734848484849)
4. Count
5. Gallons/Minute (Liters/Minute) (3.78541186)

Source of Data:

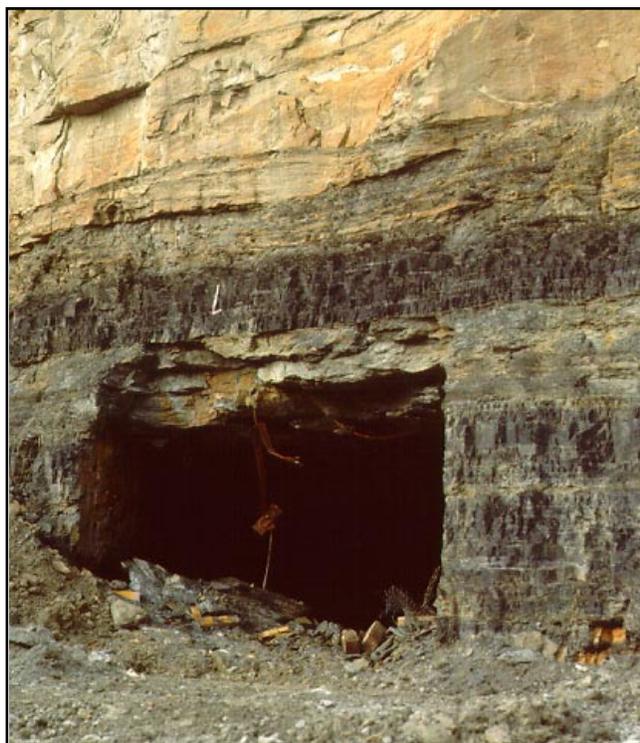
The Abandoned Mine Land Inventory System (AMLIS) as submitted by the states/Indian tribes for their Abandoned Mine Land coal programs and the Office of Surface Mining Regional Coordinating Centers for the Federal Reclamation Program.

matching funds for projects that would otherwise have not been possible.

Inventory of Abandoned Mine Land Problems

SMCRA, as amended by the Abandoned Mine Reclamation Act of 1990 (Public Law 101-508), requires the Office of Surface Mining to maintain an inventory of eligible abandoned coal mine lands that meet the public health, safety, and general welfare criteria of Section 403(a)(1) and (2). This inventory is maintained and updated to reflect reclamation accomplishments as required by Section 403(c).

The Office of Surface Mining maintains its inventory on the Abandoned Mine Land Inventory System (AMLIS), a computer system that generates reports on abandoned mine land accomplishments and problems that still require reclamation. During 1996, for the second year, the states and Indian tribes managed their own data, entering it electronically into the Office of Surface Mining's inventory system. This process resulted in 437 records added, 1,401 modified, and 57 deleted.



Abandoned underground mine portals are extremely dangerous and should never be entered.

TABLE 14
ABANDONED MINE LAND NON-COAL RECLAMATION ACCOMPLISHMENTS
PRIORITY 1 & 2 (Protection of Public Health, Safety, and General Welfare)
1978-1996

	Clogged Streams ¹	Clogged Streams Lands ²	Highwalls ³	Impoundments ⁴	Piles & Embankments ²	Slides ²	Gases ⁴	Equipment & Facilities ⁴	Water Bodies ⁴	Industrial/Residential Waste ²	Portals ⁴	Polluted Water: Ag./Ind. ⁴	Polluted Water: Human Consumption ⁴	Subsidence ²	Surface Burning ²	Underground Mine Fires ²	Vertical Openings ⁴
Alabama	0	0	0	0	0	0	0	1	0	0	7	0	0	0	0	0	1
Alaska	0	0	70 (21.3)	0	0	0	0	1	0	0	0	3	0	0	0	0	13
Colorado	0	0	150 (46.7)	0	0	0	0	0	0	0	699	0	0	0	0	0	1,792
Crow	0	0	350 (106.6)	0	4 (1.6)	1 (.4)	0	0	0	0	4	0	0	0	0	0	0
Illinois	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	0	99
Montana	0	0	10,080 (3,071.7)	0	71 (28.7)	0	1	4	0	4 (1.6)	212	0	0	0	0	0	126
Navajo	0	0	25,955 (7,909.6)	3	95 (38.4)	0	0	0	0	4 (1.6)	171	12	0	1 (.4)	0	0	64
New Mexico	0	0	0	0	3 (1.2)	0	0	1	0	0	146	3	0	5 (2.0)	0	0	438
Ohio	0	0	0	0	0	0	0	1	0	0	16	0	0	0	0	0	1
Texas	0	0	13,430 (4,092.5)	0	85 (34.3)	0	0	0	1	0	13	0	0	0	0	0	161
Utah	0	0	0	0	0	0	0	3	0	0	556	0	0	29 (11.7)	0	0	306
Wyoming	95 (152.8)	2,710 (1,095.7)	259,050 (78,941.5)	2	0	31 (12.5)	0	20	277	2 (.8)	51	2	0	5 (2.0)	0	0	58
Total	95 (152.8)	2,710 (1,095.7)	309,086 (94,188.9)	5	258 (104.2)	32 (12.9)	1	31	278	10 (4.0)	1,899	20	0	40 (16.1)	0	0	3,059

As of September 30, 1996, the system contained information for over 10,000 problem areas, mostly related to abandoned coal mines. A problem area is a geographic area, such as a watershed, that contains one or more abandoned mine problems. Problem area boundaries are delineated by the extent of their effect on surrounding land and water, not just the abandoned mine sites.

The Surface Mining Law requires the Abandoned Mine Land Program to concentrate its efforts on high priority coal sites (those affecting health,

safety, and general welfare - Priority 1 and 2). Although the Abandoned Mine Land Program is one of the nation's most successful environmental restoration programs, with over \$1.1 billion worth of coal-related high priority problems reclaimed, many projects have yet to be funded. The inventory of unfunded coal-related problems is reduced each year by state, Indian tribe, and federal reclamation projects. Unfortunately, new problems are uncovered as development expands into old coal mining areas. As of September 30, 1996, a break-down of costs from

the National Inventory of Abandoned Mine Land Problems is as follows:

Completed \$1.1 billion	28.5%
Funded \$0.2 billion	5.6%
Unfunded \$2.3 billion	65.9%
<hr/>	
Total \$3.6 billion	100%

Reclamation Awards

After more than 18 years of abandoned mine land reclamation funded under SMCRA, thousands of dangerous health and safety problems throughout the country have been eliminated. To enhance communication about achievements in abandoned mine land reclamation, the Office

of Surface Mining has presented awards to those individuals responsible for completion of the outstanding reclamation. Due to funding limitation, the Office of Surface Mining did not present awards in 1996. In 1997, reclamation awards once again will be presented to recognize the most exemplary reclamation in the country.

TABLE 14 (continued)
ABANDONED MINE LAND NON-COAL RECLAMATION ACCOMPLISHMENTS
PRIORITY 1 & 2 (Protection of Public Health, Safety, and General Welfare)
1978-1996

	Bench ²	Industrial/Residential Waste ²	Equipment & Facilities ⁴	Go ²	Highwall ³	Haul Road ²	Mine Opening ⁴	Pit ²	Spoil Area ²	
KEY	0	0	0	0	0	0	0	0	0	Alabama
Units of Measure:	0	0	0	0	0	0	0	0	0	Alaska
1. Miles (Kilometers) ^(1.609)	0	0	0	0	0	0	0	0	0	Colorado
2. Acres (Hectars) (.404687904687905)	0	0	0	0	300 (91.4)	0	0	4 (1.6)	3 (1.2)	Crow
3. Feet (Meters) (.304734848484849)	0	0	0	0	0	0	0	0	0	Illinois
4. Count	0	0	0	0	0	0	188	16 (6.4)	9 (3.6)	Montana
Source of Data:	0	0	0	0	0	13 (5.2)	3	3 (1.2)	149 (60.2)	Navajo
The Abandoned Mine Land Inventory System (AMLIS) as submitted by the states/Indian tribes for their AML coal programs and the Office of Surface Mining Regional Coordinating Centers for the Federal Reclamation Program.	0	0	0	0	0	0	0	0	0	New Mexico
	0	0	0	0	0	0	0	0	0	Ohio
	0	0	0	0	0	0	0	0	196 (79.3)	Texas
	0	0	0	0	0	0	0	0	0	Utah
	5,240 (2,121.3)	3 (1.2)	18	29 (11.7)	198,800 (60,501.2)	100 (40.4)	0	10,715 (4,336.2)	3,904 (1,579.9)	Wyoming
	5,240 (2,121.3)	3 (1.2)	18	29 (11.7)	199,100 (60,592.6)	113 (45.6)	191	10,738 (4,345.4)	4,261 (1,742.2)	Total