

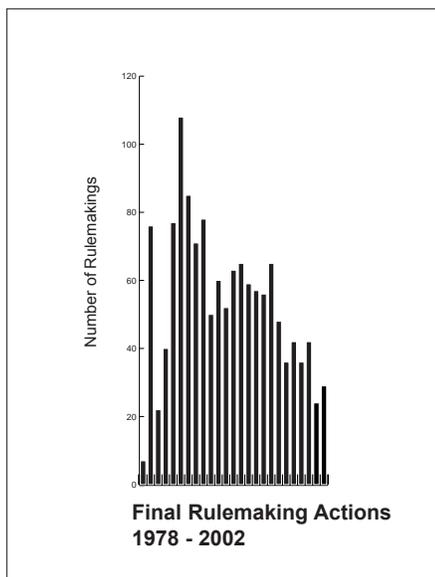


# REGULATION OF ACTIVE COAL MINES

## A REVIEW OF THE SHARED FEDERAL-STATE-INDIAN ACTIVE SURFACE AND UNDERGROUND COAL MINING AND RECLAMATION OPERATIONS THROUGHOUT THE NATION

Under the Surface Mining Law ([www.osmre.gov/smcre.htm](http://www.osmre.gov/smcre.htm)), the Office of Surface Mining is responsible for publishing the regulations ([www.osmre.gov/regindex.htm](http://www.osmre.gov/regindex.htm)) necessary to carry out the Law. The permanent regulatory program and approved state programs provide the fundamental mechanism for ensuring that the goals of the Surface Mining Law are achieved. A major objective is to maintain a stable regulatory program by improving the regulation development process and obtaining a broad spectrum of viewpoints on rulemaking activities.

### Rulemaking and State Program Amendments



The 2002 rulemaking process included discussions with coal industry representatives, citizen groups, and state regulators to obtain their input and suggestions.

During the year, the Office of Surface Mining published one proposed permanent program rule in the *Federal Register*; Abandoned Mine Land Reclamation Notices (RIN 1029-AB99), and one final permanent program rule, Civil Penalty Adjustments (RIN 1029-AC00) (see Table 7). Subject to Office of Surface Mining approval, states have the right to amend their programs at any time for appropriate reasons. Whenever the Surface Mining Law or its implementing regulations are revised, the Office of Surface Mining is required to notify the states of the changes needed to make sure that the state programs continue to meet federal requirements. As a result, the states have submitted a large number of complex amendments. The Office of Surface Mining has taken several steps to process states submissions more efficiently. For example, the amendment

review process within the Office of Surface Mining has been decentralized, and standard format and content guidelines for state program submissions have been issued to the states. In 2002, the Office of Surface Mining published 31 proposed and 28 final state program amendments in the *Federal Register*. A complete list and summary of all Office of Surface Mining *Federal Register* notices can be seen at [www.osmre.gov/ocfeder.htm](http://www.osmre.gov/ocfeder.htm).

Tree planting efforts at this Western Kentucky mine operation began voluntarily in 1948, before there were reclamation requirements, and have continued to the present day. Company foresters and soil scientists recognized the long-term environmental and economic benefits of forest lands and began planting trees on the reclaimed land. After years of growth the forests reestablished on reclaimed lands are difficult to distinguish from native forests on nearby unmined land (left).

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**TABLE 7: FINAL RULES PUBLISHED**

**Civil Penalty Adjustments**

30 CFR 723 and 845

11/21/01

This rule adjusts the penalty amount of certain civil monetary penalties authorized by the Surface Mining Law. The rule implements the Federal Civil Penalties Inflation Adjustment Act of 1990 which requires that civil monetary penalties be adjusted for inflation at least once every four years.

## Significant Court Decisions

During 2002, there were seven significant court decisions that influenced the implementation of the Surface Mining Law: Valley Fills, Subsidence, Eleventh Amendment, Abandoned Mine Land Fund, and Takings (see Table 8).

## State Programs

Since May 3, 1978, all surface coal mines have been required to have permits and to comply with either Office of Surface Mining regulations or corresponding

approved state program provisions (in states that have primacy). Currently, there are 24 primacy states that administer and enforce approved programs for regulating surface coal mining and reclamation under the Surface Mining Law. An effective relationship between the Office of Surface Mining and the states is fundamental to the successful implementation of the Surface Mining Law. This shared federal-state commitment to carry out the requirements of the Surface Mining Law is based on common goals and principles that form the basis for the relationship.

## Oversight of State Programs

Section 517(a) of the Surface Mining Law requires the Office of Surface Mining to make inspections as necessary to evaluate the administration of approved state programs. Most state programs were approved in the early 1980's, and the Office of Surface Mining's oversight of the programs focused on the implementation of the many procedural and process requirements such as permitting, inspection, enforcement, and penalties, each with numerous mandated requirements. These are prescribed to achieve the environmental protection performance standards and the overall purposes of the Surface Mining Law.



Reclamation at this 200-acre steep-slope contour mine in Eastern Kentucky exemplifies the intent of the Surface Mining Law. When reclaimed in the early 1990's topsoil was spread on the slopes and grass planted (below). After five years of natural plant succession, native trees and shrubs cover the slopes and reforestation is quickly progressing (left). With proper planning and effective site management, both economical mining and successful reclamation can be achieved.



## TABLE 8: SIGNIFICANT COURT DECISIONS

### Valley Fills

**Kentuckians for the Commonwealth, Inc. (KFTC) v. Rivenburgh**, No. 01-0770 (S.D. W. Va.)

On May 8, 2002, Judge Haden granted Kentuckians for the Commonwealth's motion for summary judgment and held that the Clean Water Act does not allow filling the waters of the United States solely for waste disposal. Kentuckians for the Commonwealth filed this suit on August 21, 2001, against officials of the Department of the Army, Corps of Engineers (COE), seeking review of a decision in which the Corps of Engineer's Huntington, West Virginia District had authorized Martin County Coal Corporation to place excess spoil from coal mining in streams in Martin County, Kentucky. The Department of the Interior is not a party to this litigation, although this case raises issues relating to valley fills and mountaintop mining, matters that are subject to regulation under the Surface Mining Law. Judge Haden held that agency rulemaking or permit approval that allows the filling of streams for waste disposal is *ultra vires*, beyond the authority conferred by the Clean Water Act, and that only Congress can rewrite the Clean Water Act to allow such fills.

### Subsidence

**Citizens Coal Council, et al., v. Norton**, No. 00-274 (D.D.C.)

On March 28, 2002, the United States District Court for the District of Columbia, James Robertson, J., rejected the Secretary's regulation that interprets subsidence from underground mining not to fall within the scope of the term "surface coal mining operations" as defined in Section 701(28) of SMCRA. 30 U.S.C. § 1291(28).

### Eleventh Amendment

**Pennsylvania Federation of Sportsmen's Clubs, Inc. v. Hess**, Nos. 00-2139, 01-1683 (3d Cir.) (consolidated)

On July 24, 2002, a panel of the Third Circuit ruled that the Eleventh Amendment to the United States Constitution bars suit in federal court against a state official where what is at issue is that official's purported failure to implement, administer, enforce, and maintain a federally-approved state coal mining program. In reaching its decision the panel ruled that state program provisions promulgated pursuant to the Surface Mining Law do not constitute federal law and hence do not fall within the so-called *Ex Parte Young* exception to the Eleventh Amendment.

### Abandoned Mine Land Fund

**Coal Operators and Associates, Inc., et al. v. Norton**, No. 00-6320 (6th Cir.)

On June 3, 2002, the United States Court of Appeals for the Sixth Circuit affirmed the District Court's dismissal of this action which sought to force a distribution back to the states of one half (or approximately \$823,291,000.00) of the approximately \$1.4 billion unappropriated balance in the Abandoned Mine Land Fund. The Appeals Court held that the private party appellants had failed to establish standing to sue on behalf of the states to whom any duty is owed under the Surface Mining Law.

### Takings Litigation

**Wyatt v. United States**, Nos. 99-5054, -5059 (Fed. Cir.) (Previously identified as *Eastern Minerals Int'l, Inc. v. United States*)

On May 20, 2002, the U.S. Supreme Court denied plaintiffs' petition for a writ of *certiorari*, leaving intact a favorable decision of the U.S. Court of Appeals for the Federal Circuit. The Federal Circuit, on November 19, 2001, reversed a trial court decision in which the U.S. Court of Federal Claims found a permanent Fifth Amendment taking based on the Office of Surface Mining's "extraordinary delay" in processing Eastern Mineral International, Inc.'s permit application. In reversing the trial court's judgment, the Federal Circuit held that: (1) plaintiffs could not maintain a permanent takings action after February 28, 1991, since the permit applicant voluntarily relinquished its coal lease on that date and, therefore, "possessed no valid property interest from which it could assert a takings claim" and (2) there was no temporary taking prior to February 28, 1991, because the trial court's finding of extraordinary delay was "clearly erroneous."

**Stearns Co. v. United States**, No. 594\_89L (Fed. Cl.)

On August 5, 2002, Senior Judge Smith of the U.S. Court of Federal Claims issued a decision finding the government liable for a physical taking of the plaintiff's coal interests located underneath the Daniel Boone National Forest in Kentucky. He held that Office of Surface Mining's implementation of section 522 of the Surface Mining Law effected a physical taking by "revers[ing] the basic structure of rights between surface and subsurface owners." Judge Smith awarded the plaintiff \$5,000,000, plus compound interest from 1980, attorneys fees, and costs (the \$5 million plus interest and fees has been accrued in the 2002 financial statements).

The Office of Surface Mining employs a results-oriented oversight strategy that was devised in consultation with the states and emphasizes cooperative problem-solving, tailors evaluations to state-specific conditions, and develops performance agreements between each state and its Office of Surface Mining field office.

Specifically, to further reporting of end results and on-the-ground success, the Office of Surface Mining now evaluates and reports state-specific and national findings for offsite impacts and reclamation success. The purpose of measuring offsite impacts is to protect citizens, public and private property, and the environment outside of areas authorized for mining and reclamation activities. This measurement is intended to

identify the number and severity of offsite impacts; determine causes of the impacts; and identify where improvements may be made to lessen the number and degree of these impacts. Success is determined on the numbers expressed as a percent of inspectable units<sup>6</sup> that achieve the goal of having no offsite impacts and on the number of acres that meet the bond release requirements for the various phases of reclamation. During 2002, 92.8 percent of the inspectable units were free of offsite impacts (an decrease of 1.1 percent from 2001).

6. An inspectable unit is a coal mining or exploration operation where an inspection obligation exists under the Surface Mining Law. One unit may consist of an individual permit; a consolidation of several permits issued to the same permittee, which, for all practical purposes, constitutes the same mining operation; or in the case of large mines, smaller, logical units of a single permit that are more amenable to inspection.

After topsoil is replaced, seed must be spread over the soil and stabilized to ensure germination and establishment. At this Missouri active mine hydroseeding spreads a mixture of seed, water, and fertilizer, without driving mechanized equipment over the site. Using this technique, even steep slopes or the stockpile of topsoil shown in this photo can be successfully seeded.



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Successful tree growth has been achieved on many eastern U.S. mine sites. The mixed tree stand on this reclaimed West Virginia mine site began as a tree planting along the ridge. Additional trees have since "volunteered" into the favorable growing conditions created by the reclamation and now cover the entire hillside.

Since 1996, the Office of Surface Mining has completed four reviews of the implementation of the oversight policy. Although there are a few exceptions, the four reviews showed that the cooperative approach provides a better atmosphere for resolving problems with states. Also, the oversight strategy has resulted in improvements to state program implementation and in resolution of some long-standing issues. (See [www.osmre.gov/report02.htm](http://www.osmre.gov/report02.htm) for copies of Annual State Oversight Reports.)

Table 9 provides the Office of Surface Mining's oversight inspection and enforcement activities during 2002 (detailed monthly reports are available at [www.osmre.gov/i&eindex.htm](http://www.osmre.gov/i&eindex.htm)).

## Federal Programs

Section 504(a) of the Surface Mining Law requires the Office of Surface Mining to regulate surface coal mining and reclamation activities on non-federal and non-Indian lands in any state if:

- the state's proposal for a permanent program has not been approved by the Secretary of the Interior;

**TABLE 9: FEDERAL OVERSIGHT OF STATE PROGRAMS**

State	Violations Cited by the Office of Surface Mining <sup>1</sup>			
	Site Visits	Notice of Violations	Failure-To-Abate Cessation Orders	Imminent Harm Cessation Orders
Alabama	96	0	0	0
Alaska	4	0	0	0
Arkansas	5	0	0	0
Colorado	8	0	0	0
Illinois	106	0	0	0
Indiana	81	0	0	0
Iowa	23	0	0	0
Kansas	9	0	0	0
Kentucky	402	4	0	0
Louisiana	4	0	0	0
Maryland	41	0	0	0
Mississippi	2	0	0	0
Missouri	40	0	0	0
Montana	4	0	0	0
New Mexico	1	0	0	0
North Dakota	2	0	0	0
Ohio	221	0	0	0
Oklahoma	37	0	0	0
Pennsylvania	547	12	4	0
Texas	14	0	0	0
Utah	4	0	0	0
Virginia	167	1	0	0
West Virginia	466	2	0	0
Wyoming	13	0	0	0
<b>Total</b>	<b>2,297</b>	<b>19<sup>2</sup></b>	<b>4</b>	<b>0</b>

1. Excludes any Notice of Violations or Cessation Orders that have been vacated.

2. Of the 19 Notice of Violations, 14 were for Abandoned Mine Land Fee related problems (Kentucky 1, Pennsylvania 11, and West Virginia 2).

- the state does not submit its own permanent regulatory program; or

- the state does not implement, enforce, or maintain its approved state program.

Although the Office of Surface Mining encourages and supports state primacy in the regulation of coal mining and reclamation operations, some states with coal reserves have elected not to submit or maintain regulatory programs. Those states are called federal program states, and their coal mining and reclamation

operations are regulated by the Office of Surface Mining. Federal programs are in effect in 12 states: Arizona, California, Georgia, Idaho, Massachusetts, Michigan, North Carolina, Oregon, Rhode Island, South Dakota, Tennessee, and Washington.

Of the federal program states, only Tennessee and Washington had active coal mining in 2002. Table 10 includes the regulatory actions in those two states during 2002.

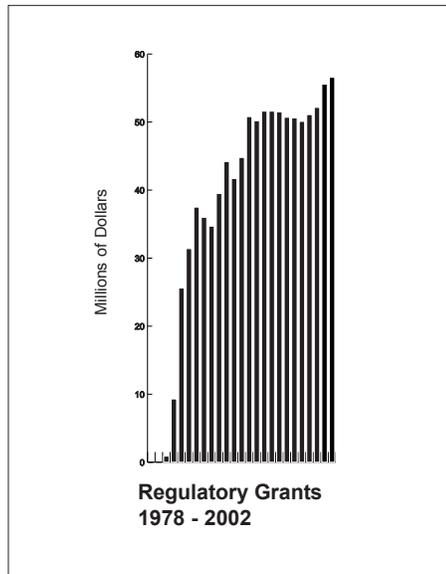
**TABLE 10: REGULATORY PROGRAM STATISTICS**

State	Regulatory Staffing	AML Staffing	New Permits	New Acreage Permitted	Total Acreage Permitted	Disturbed Acreage	Inspectable Units	Complete Inspections	Partial Inspections	Notice of Violations	Failure-To-Abate Cessation Orders	Imminent Harm Cessation Orders	Bond Forfeitures	Acreage of Phase I Bond Release	Acreage of Phase II Bond Release	Acreage of Phase III Bond Release
Alabama <sup>1</sup>	26.00	17.75	9	3,073	83,710	NA	211	2,588	427	55	0	3	14	2,812	2,114	4,527
Alaska	3.48	5.50	1	837	9,099	1,445	11	27	55	1	0	0	0	0	0	0
Arizona	NA	NA	1	417	417	0	1	0	0	0	0	0	0	0	0	0
Arkansas	4.00	6.65	0	0	1,144	541	14	57	13	2	0	0	0	20	0	0
Colorado	24.00	14.00	0	0	1,626,000	23,082	66	196	368	26	0	0	0	97	865	2,598
Crow Reservation	1.45	4.55	0	0	4,747	2,904	1	4	8	2	0	0	0	1,308	1,048	0
Georgia	NA	NA	0	0	0	141	6	6	1	0	0	0	0	0	0	0
Hopi Reservation	2.00	6.40	0	0	6,137	209	1	7	11	0	0	0	0	0	0	0
Illinois <sup>1</sup>	36.00	36.00	4	1,063	1,887	NA	91	414	1,013	43	1	0	0	12,313	13,218	12,172
Indiana <sup>1</sup>	53.00	21.00	8	4,925	288,100	NA	152	852	1,654	50	1	0	1	5,004	5,887	8,408
Iowa <sup>1</sup>	2.15	3.45	0	0	4,133	NA	24	96	24	4	0	0	9	92	92	39
Kansas <sup>1</sup>	3.25	10.75	2	562	4,237	NA	12	44	72	1	0	0	0	0	934	934
Kentucky	342.01	82.00	96	44,484	1,705,987	246,774	2,073	9,346	16,815	889	98	20	10	12,997	4,207	14,465
Louisiana	2.65	0.60	0	0	45,200	17,084	2	8	16	3	0	0	0	0	0	986
Maryland <sup>1</sup>	11.38	4.80	3	153	6,053	NA	64	341	634	7	0	1	0	20	74	16
Mississippi	2.07	NA	0	0	1,908	985	1	3	9	0	0	0	0	0	0	0
Missouri <sup>1</sup>	11.70	11.20	1	575	17,532	NA	47	108	213	46	31	0	0	238	275	615
Montana	17.00	8.85	1	7,710	62,621	29,763	17	87	88	0	0	0	0	253	126	0
Navajo Reservation	6.00	26.80	0	1,866	83,044	31,099	14	53	60	7	0	0	0	485	0	0
New Mexico	10.50	9.00	0	0	97,000	2,138	15	56	124	0	0	0	NA	NA	0	0
North Dakota	8.75	4.88	1	17,051	75,129	49,190	35	140	494	0	0	0	0	0	0	109
Ohio	32.21	41.73	41	3,897	95,400	46,347	363	1,455	2,009	147	0	11	2	3,557	3,693	5,888
Oklahoma <sup>1</sup>	25.20	6.00	1	3,147	31,562	NA	89	319	560	7	0	0	0	3,265	1,601	2,659
Pennsylvania <sup>1</sup>	266.50	128.00	64	2,311	408,900	NA	2,145	8,218	11,829	952	30	0	NA	4,532	6,182	7,231
Tennessee	51.00	NA	3	525	25,785	15,511	385	1,013	1,022	28	2	2	0	1,148	1,690	745
Texas	39.00	8.00	1	9,341	248,810	149,551	20	76	209	10	0	0	0	1,134	1,134	1,120
Utah	23.00	11.00	1	114	171,232	2,367	27	115	181	6	0	2	0	1	62	0
Ute Reservation	2.00	NA	0	0	175	120	2	7	8	0	0	0	0	0	0	0
Virginia	79.00	16.06	22	3,319	73,135	45,763	613	2,575	3,417	302	0	4	0	952	1,411	3,031
Washington	NA	NA	0	0	14,930	6,136	2	8	17	4	0	0	0	0	0	0
West Virginia	295.23	69.50	59	10,556	296,542	187,218	2,431	7,435	11,328	1,359	91	25	9	2,728	7,170	7,830
Wyoming	28.98	13.50	1	0	335,200	4,067	35	132	243	10	0	0	0	1,397	0	34
<b>Total</b>	<b>1,409.67</b>	<b>567.97</b>	<b>320</b>	<b>115,926</b>	<b>5,825,756</b>	<b>NA<sup>1</sup></b>	<b>8,970</b>	<b>35,786</b>	<b>52,992</b>	<b>3,961</b>	<b>254</b>	<b>68</b>	<b>45</b>	<b>54,353</b>	<b>51,783</b>	<b>73,407</b>

1. Disturbed acreage is not available for nine states and a national total is not provided because it would not accurately reflect the nationwide total.

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## Grants to States and Tribes



Section 201 of the Surface Mining Law authorizes the Office of Surface Mining to help state regulatory authorities develop or revise surface mining regulatory programs. In 2002, the Office of Surface Mining awarded \$703,695 for program development grants to the Crow, Northern Cheyenne, Hopi, and Navajo Tribes.

Section 705 of the Surface Mining Law authorizes the Office of Surface Mining to provide grants to states with approved regulatory programs in amounts not exceeding 50 percent of annual state program costs, matching state regulatory costs dollar for dollar. In addition, when a state elects to administer an approved program on federal land through a cooperative agreement with the Office of Surface Mining, the state becomes eligible for financial assistance of up to 100 percent of the amount the federal government would have spent to regulate coal mining on those lands. Table 11 shows grant amounts provided to states during 2002 to administer and enforce regulatory programs. During 2002, the Office of Surface Mining awarded 96 percent of the regulatory grants to the states within 60 days of receiving the grant application.



Because surface mining removes the original plant cover from the land and exposes soil, special care is needed. Until the mined land is stabilized by revegetation, snow melt and rainfall can pick up sediment and erode mined lands much faster than undisturbed areas. To prevent offsite sedimentation impacts of the mining process, sedimentation ponds are constructed to catch sediment-laden water. Solids settle out before the clear water is allowed to flow from the mine site. At this Craig, Colorado mine, site ponds are located below the active mining operation and catch all surface water before it leaves the permitted mine area.

## Regulation of Surface Mining on Federal and Indian Lands

Section 523(a) of the Surface Mining Law requires the Secretary of the Interior to establish and implement a federal regulatory program that applies to all surface coal mining operations that take place on federal land. The Office of Surface Mining enacted 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. Of the 234 billion tons of identified coal reserves in the western United States, 60 percent is federally owned. The development of federal coal reserves is governed by the Federal Coal

Management Program of the Department of the Interior's Bureau of Land Management.

Through cooperative agreements, the administration of most surface coal mining requirements of the Federal Lands Program may be delegated by the Secretary of the Interior to states with approved regulatory programs. By the end of 2002, the Secretary had entered into such cooperative agreements with Alabama, Colorado, Illinois, Indiana, Kentucky, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Utah, Virginia, West Virginia, and Wyoming (see [www.osmre.gov/coop.htm](http://www.osmre.gov/coop.htm)). Under the Surface Mining Law, once the Secretary

**TABLE 11: REGULATORY GRANT OBLIGATIONS**

State/Tribe	2002 Federal Funding	2001 Federal Funding	Cumulative Through 2002 Federal Funding <sup>1</sup>
Alabama	\$1,021,425	\$987,837	\$25,184,421
Alaska	182,455	178,665	5,536,230
Arkansas	137,851	130,329	3,414,155
Colorado	1,885,631	1,846,452	27,625,006
Illinois	2,884,006	2,682,741	51,958,645
Indiana	1,874,576	1,863,869	30,931,529
Iowa	126,089	145,981	2,649,545
Kansas	125,114	137,040	2,834,049
Kentucky	13,067,882	12,895,953	259,275,387
Louisiana	158,404	189,484	3,475,427
Maryland	572,272	486,693	11,240,448
Michigan	0	0	135,458
Mississippi	109,628	115,965	1,142,871
Missouri	505,153	491,100	8,483,747
Montana	957,649	961,707	16,427,616
New Mexico	743,966	689,035	12,245,140
North Dakota	421,240	486,822	11,039,428
Ohio	2,135,541	1,600,123	57,024,796
Oklahoma	1,230,080	1,087,936	17,654,932
Pennsylvania	11,380,931	11,222,798	207,453,289
Rhode Island	0	0	158,453
Tennessee	0	0	5,340,085
Texas	1,451,800	1,497,816	21,703,598
Utah	1,763,318	1,764,267	27,422,152
Virginia	3,183,539	3,336,526	65,162,629
Washington	0	0	4,893
West Virginia	7,929,525	8,143,010	114,969,523
Wyoming	2,023,230	1,952,811	32,180,898
Crow Tribe	72,832	63,522	1,039,792
Hopi Tribe	168,849	167,460	1,574,638
Navajo Tribe	435,450	433,263	3,810,633
N. Cheyenne Tribe	26,564	15,260	89,845
<b>Total</b>	<b>\$56,575,000</b>	<b>\$55,574,465</b>	<b>\$1,029,189,258</b>

1. Includes obligations for AVS, TIPS, Kentucky Settlement, and other Title V cooperative agreements. Figures for 2002 do not include downward adjustments of prior-year awards. However, cumulative figures are net of all prior-year downward adjustments.

Navajo Reservation, one mine on the Hopi Reservation, a portion of an underground mine and a haul road on the Ute Mountain Ute Reservation, and one mine on the Crow Reservation permitted under the permanent Indian Lands Program. One mine on the Navajo and Hopi Reservation is operating under the interim program. Also, on the Navajo reservation, a permit application was submitted for a coal preparation plant, in accordance with the permanent Indian Lands Program, and is operating under administrative delay. In addition, the Office of Surface Mining, in cooperation with the Bureau of Indian Affairs and the Navajo Nation, is overseeing the final reclamation of three mines on the Navajo Reservation that are still under the interim regulatory program.

Section 2514 of the Energy Policy Act of 1992 (Public Law 102-486) gives authority to provide grants to the Crow, Hopi, Navajo, and Northern Cheyenne Tribes to assist them in developing programs for regulating surface coal mining and reclamation operations on Indian lands. The development of these programs includes: creating tribal mining regulations and policies; working with the Office of Surface Mining in the inspection and enforcement of coal mining activities on Indian lands (including permitting, mine plan review, and bond release); and

At this Beulah, North Dakota reclaimed mine site, it is impossible to identify where the mining operation was located. The company has complete mining and reclamation, bonds were released, and local land owners are using the land for grazing, just as they did prior to mining.



and a 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. The Office of Surface Mining maintains an oversight function to ensure 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 are carried out by the Office of Surface Mining. During 2002, the Office of Surface Mining did not issue any new permits on federal lands.

For states with leased federal coal, the Office of Surface Mining prepares the Mining Plan Decision Documents required by the Mineral Leasing Act and documentation for other nondelegable authorities, for approval by the Secretary of the Interior. During 2002, seven mining plan actions were prepared and approved for coal mines on federal land (Colorado 1, Montana 2, New Mexico 1, North Dakota 1, and Wyoming 2).

Pursuant to Section 710 of the Surface Mining Law, the Office of Surface Mining regulates coal mining and reclamation on Indian lands. There are three mines on the

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education in the area of mining and mineral resources. Development grant funding for 2002 was \$703,695. Table 10 includes statistics on regulatory activities on Indian lands during 2002.

On February 19, 1999, the Office of Surface Mining proposed a rule in the *Federal Register* to amend the regulatory

Mining also proposed changes to the Federal and Indian Lands Programs in conjunction with the proposed change in the definition of Indian lands. The primary effect of the proposal would be to transfer surface mining regulatory jurisdiction from the state to the Office of Surface Mining for individual Navajo trust allotments located within the Navajo land

### Electronic Permitting

The Office of Surface Mining's electronic permitting outreach started in Wyoming in 1993, became a national initiative in 1996, and will continue as a priority into the next year. Electronic permitting is a long-term initiative that is already resulting in significant monetary and time savings, as it provides more complete and up-to-date records for all those involved in the permitting process. The Office of Surface Mining is currently assisting primacy states in developing and implementing various aspects of electronic permitting. When implemented, electronic permitting provides permit reviewers with computer-based tools to access electronic documents, maps, and data and to perform necessary environmental analyses. Additional benefits include the ability to share computer-based data with managers, field personnel, other agencies, and the public. Availability of electronic permitting tools also enables the state regulatory agencies to convert old pre-mining data to electronic formats.

In 2002, seven western states (Alaska, Colorado, Montana, New Mexico, North Dakota, Utah, and Wyoming), three eastern states (Kentucky, Virginia, and West Virginia), and five mid-continent states (Alabama, Illinois, Indiana, Mississippi, and Texas) are in various stages of implementing electronic permitting programs.

### Pennsylvania Anthracite Program

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



At this reclaimed Ohio mine site the operator created a permanent impoundment from a sedimentation pond. During the active mining the pond prevented sediment from leaving the permitted area. Now as a permanent pond, the impoundment receives clear drainage from the reclaimed land and is used to water livestock.

definition of "Indian lands." The proposed rule clarifies that the definition includes individual Indian trust allotments located within an approved tribal land consolidation area. The Office of Surface Mining agreed to propose the rule change under the terms of a 1995 settlement agreement between the Department of the Interior and the Navajo Nation and Hopi Tribe. The Office of Surface

consolidation area in New Mexico. The Office of Surface Mining held a public hearing on the proposed rule and the comment period closed June 21, 1999. The Office of Surface Mining has reviewed the public comments received on the proposed rule and expects to issue a final rule in the near future.



To facilitate mining of a coal seam in Gillette, Wyoming, blasting was used to loosen the coal after the overburden was removed (above). Approximately half a million tons of coal in a seam 80 feet thick was loosened by this single blast.

Today, many reclaimed mine sites reestablish and improve wildlife habitats. For bird species that require specific nesting structures, nesting boxes are constructed and placed to attract and retain a breeding population on the reclaimed land. This bluebird box (below) was placed on a fence post by a mine operator in Hayden, Colorado. It provides the necessary environment for these birds to quickly become reestablished on the reclaimed land and encourages greater diversity of wildlife on the site.



The Pennsylvania anthracite coal region is located in the northeast quarter of the state and covers approximately 3,300 square miles. 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 ensure that highwalls are eliminated and the area is restored to a productive postmining land use. The long history of mining in the anthracite region has produced a legacy of abandoned mine land problems. However, because most active mining operations affect previously disturbed land, a large percentage of abandoned mine land is eventually restored to productive land use in connection with active mine reclamation.

In 2001,<sup>7</sup> the anthracite mining industry produced approximately 3.89<sup>8</sup> million net tons, a decrease of 19,000 tons from 2000. Anthracite operators mined approximately 2.09 million tons from culm and bank material (compared to 1.35 million tons in 2000<sup>9</sup>), 1.65 million tons from surface mines (compared to 2.33 million tons in 2000), and 0.15 million tons from underground mines (compared to 2.2 million tons in 2000). The reprocessing of anthracite culm banks accounts for about half of the total anthracite coal production and helps to fuel several cogeneration plants. The Pennsylvania anthracite program currently includes 333 inspectable units (60 underground mines, 14 preparation plants, 4 refuse disposal sites, 124 reprocessing operations, and 131 surface mines). Pennsylvania's Department of Environmental Protection conducted 3,290 inspections (compared to 3,867 in 2000) and issued 161 violations (compared to 217 in 2000) in the Anthracite region. Pennsylvania's Department of Environmental protection continues to successfully carry out the provisions of the anthracite regulatory program.

Pennsylvania has initiated numerous environmental restoration projects in the Anthracite Region that deal with land restoration and water quality improvement of land and waters affected by past mining activities.

The Pennsylvania Department of Environmental Protection's, Pottsville District Office, in cooperation with other bureaus, agencies, groups, companies, and individuals continues to promote and oversee water quality improvement projects. One important watershed is the Swatara Creek. Early water quality projects within the watershed date back to the 1970's; however, with the interest of environmental partners in the mid and late 1990's, numerous water quality improvement projects have been initiated. These projects include the installation of such enhancements as diversion wells,

7. Calendar Year  
8. Pennsylvania Department of Environmental Protection, Harrisburg, 2001, *Annual Report On Mining Activities*

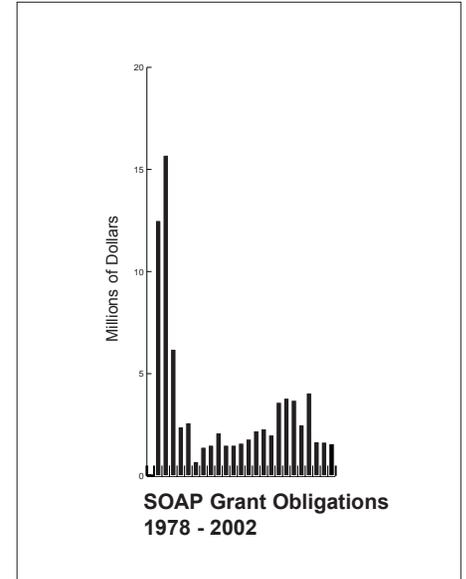
## REGULATION OF ACTIVE COAL MINES

anoxic drains, limestone lining of stream channels, stream relocation and channel reconstructions, aerobic passive wetlands treatment systems, as well as the reclamation of abandoned silt dams, stripping pits, and mine openings within the headwaters areas of the watershed.

Pennsylvania's Bureau of Abandoned Mine Land Reclamation, Wilkes-Barre District Office, oversees the restoration of lands and improving the quality of water affected by past mining. This environmental restoration effort is mainly achieved with projects that involve backfilling of abandoned stripping pits, mine openings, constructing aerobic passive wetlands treatment systems, installing diversions

wells, and reconstructing stream channels. The office incorporates various types of wildlife enhancements in addition to the construction and installation of bird and bat boxes during reclamation. The Office also has conducted several land restoration and water quality improvement projects in the headwater area of Swatara Creek.

### Small Operator Assistance Program (SOAP)



After the topsoil has been removed by scrapers, the subsoil is removed using hydraulic shovels and haul trucks at this Indiana mine. The subsoil is immediately hauled back to the reclamation area, dumped, and graded. This equipment, combined with direct haul-back methods, reduces compaction, a serious problem in valuable prime farmland soil.



Section 401 (c)(11) of the Surface Mining Law authorizes up to \$10 million annually of the fees collected for the Abandoned Mine Reclamation Fund to be used to help qualified small mine operators obtain technical data needed for permit applications. Beginning with 1992, the Abandoned Mine Reclamation Act of 1990 increased the qualifying production limit from 100,000 to 300,000 tons. The Energy Policy Act of 1992 (Public Law 102-486) added additional technical permitting services to the list of items eligible for funding under the Small Operator Assistance Program. The new services include engineering analyses and design necessary for hydrologic impact determination, cross-section maps and plans, geologic drilling, archaeological and historical information, plans required for the protection of fish and wildlife habitat and other environmental values, and pre-blast surveys. The program has always funded the hydrologic and geologic data collection and analyses required as part of the probable hydrologic consequences determination and statement of overburden analysis under Section 507(c) of the Surface Mining Law.

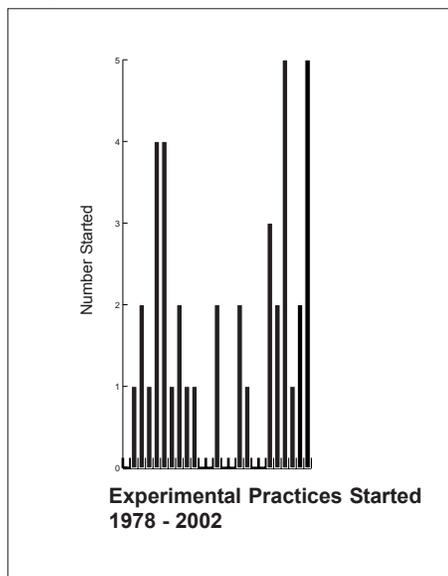
**TABLE 12: SMALL OPERATOR ASSISTANCE PROGRAM**

State	Grant Amount <sup>1</sup>		Operators	Projects Started
	2002	2001		
Alabama	\$35,000	\$55,107	2	1
Kentucky	513,441	1,031,677	56	69
Maryland	35,000	35,000	1	1
Ohio	100,000	80,000	5	6
Pennsylvania	805,054	225,616	42	48
West Virginia	84,743	224,916	1	1
<b>Total</b>	<b>\$1,573,238</b>	<b>\$1,652,316</b>	<b>107</b>	<b>126</b>

1. These figures do not include downward adjustments of prior-year awards.

Small Operator Assistance Program regulations (30 CFR 795) place program responsibility with the states that have Office of Surface Mining approved permanent surface mining programs. In states with federal programs, the Office of Surface Mining operates the Small Operator Assistance Program. In 2002, 107 small mine operators received assistance (compared to 79 in 2001 and 108 in 2000). Table 12 provides a summary of the Small Operator Assistance Program by state during 2002.

**Experimental Practices**



Section 711 of the Surface Mining Law allows variances from Sections 515 and 516 of the performance standards as alternative, or experimental, mining and

reclamation practices to encourage advances in mining technology or to allow innovative industrial, commercial, residential, or public postmining land uses. However, the experimental practices must be potentially more, or at least as, environmentally protective as the environmental protection performance standards established by the Surface Mining Law. Approval and monitoring of a permit containing an experimental practice requires a close working relationship between the mine operator, the state, and the Office of Surface Mining.

During 2002, five new experimental practices were approved. All five of these experimental practices involved variances from approximate original contour in order to allow postmining land use for industrial, commercial, residential, or public use. Thirteen of the 40 experimental practices (11 of the last 16) approved since the enactment of the Surface Mining Law involve the retention of highwalls to facilitate the creation of land suitable for such uses. Section 711 specifically allows the use of experimental practices to create such land. Four of these practices have been determined to be successful and the Office of Surface Mining is currently looking into the question of whether the prohibition on leaving highwalls after mining and reclamation is absolute, or whether regulations could be developed, based on a history of successful experimental



During the mining and reclamation at this Clintwood, Virginia site 13,000 feet of abandoned mine highwalls were eliminated and reclaimed to the same standard as the rest of the active mine areas. The site has been transformed from a barren wasteland into an aesthetically pleasing landscape with productive hay and pasture land.

practices, that would allow the leaving of highwalls on land reclaimed for the postmining land uses specified in Sec. 711 of the Law (industrial, commercial, residential, or public use).

In addition to the 16 experimental practices currently underway, since inception of the program 16 were determined to be successful, three unsuccessful, one was terminated due to a regulation change, and four have been completed; but, a final report has not yet been submitted.

**Reclamation Awards**

To recognize and transfer the lessons learned from completing the Nation's most outstanding reclamation, the Office of Surface Mining presents awards to coal mine operators who have completed mining and reclamation operations that result in outstanding on-the-ground performance. For a description of the active mining award program and 2003 rules, see [www.osmre.gov/activerules01.htm](http://www.osmre.gov/activerules01.htm). The 2002 Awards were presented September 18, 2002, at a banquet hosted by the National Mining Association, as follows:

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### **Director's Award:**

Each year, one coal mining operation in the country is selected to receive the Director's Award for outstanding achievement in a specific area of reclamation. This year, the award was presented for exemplary reclamation that resulted in outstanding cultural, historical, or archaeological preservation on reclaimed coal mine land, and the Award was presented to two companies, The Falkirk Mining Company in Underwood, North Dakota, and Peabody Western Coal Company, Kayenta Mine, located in Navajo County, Arizona.

■ The Falkirk Mine is located in a landscape that was home to prehistoric indigenous Indian groups. Permitting over the past 25 years has required many archaeological and historic site surveys, resulting in preservation before mining. In addition, Falkirk made discoveries during mining that included prehistoric burial and bison-kill sites. Mining operations were

halted until all evidence could be recovered and permanent protection established.

■ At the Peabody Kayenta Mine there is a long history of archaeological research. Information from Navajo and Hopi traditional medicine men, herbalists, and Black Mesa residents identified special plants. Local seed was collected and planted. Since the project began 10 years ago, more than 234,000 cultural plant seedlings have been planted on nearly 170 acres. In 1966 newly passed federal antiquity laws dictated that, before mining, a thorough investigation had to be made and detailed reports filed. When the Black Mesa Archaeological Project was initiated, no one realized it would become one of the largest, longest-running archaeological projects in North America.

The sensitivities of these companies to cultural and community values, and their effectiveness in preservation, is a model for others to follow.

### **National Awards:**

■ Consolidation Coal Company, Burning Star No. 4 Mine, Cutler, Illinois. The Burning Star mine produced coal from 1973 to 1997 and is now completely reclaimed. The successful restoration of two major streams was a significant engineering and reclamation accomplishment at this former mine site. Almost nine miles of Galum and Bonnie creeks were restored after being temporarily diverted during the mining. The high-quality wildlife habitat surrounding the streams includes deep water, wetlands, flood plain, and upland vegetation communities. Approximately 350,000 trees were planted in association with the stream restoration. This

Reclamation at this Petersburg, Indiana mine site (right) has resulted in the development of a planned landscape, managed to promote fish and wildlife and related environmental values. Today more than 1,200 acres have been reclaimed including many water impoundments ranging in size from about one acre to over 45 acres. Their sizes and shapes provide a wide range of habitats and support a large variety of fish species. In addition, the water provides a rich diverse environment for plants and animals.

The Surface Mining Law requires that all highwalls created by mining be covered. Generally this is accomplished by placing spoil against the highwall and grading it so that the contour of the land, after the highwall is covered, approximates the original slope. The final reclaimed slope at this Laurel County, Kentucky mining operation (below) closely matches the original contour of the land, leaving no trace of the highwall.





Heavy plastic liners were spread over this graded mine site near Pittsburgh, Pennsylvania to create a pollution barrier for a large landfill. Reclamation for this land use required careful grading to provide even slopes and a clean surface. Multiple barriers of plastic and soil prevent leakage and provide drainage to the bottom of the fill for collection and treatment. In the future, the entire valley of this former mine will be filled with refuse and covered with earth.

rough grade needed for the golf course and a rock crusher was used to provide base material for special areas. Two ponds provide irrigation water for the automated sprinklers located throughout the entire length of the bent grass greens, fairways, and tees. This project is a showcase for reclamation creativity.

■ Red River Mining Company, Coushatta, Louisiana. Red River's lignite mine has been operating for 12 years and has never had a lost-time accident or environmental violation. Reclamation of the mine site is mostly commercial forestry, a traditional use of land in this moist lowland landscape. Loblolly pines have been planted since 1991 and are now growing into stands of marketable forests. Smaller areas have been planted in pasture land and permanent ponds have been constructed to increase land value and provide water for cattle. Pond features include hardwoods, forbes, and grassland species that provide both shelter and food supplies for waterfowl, deer, and other wildlife.

■ Carbon Coal Company, Carbon No. 2 Mine, Gallup, New Mexico. Carbon Coal Company's mining at this operation ended in 1986, and final grading and revegetation seeding was completed in 1991. Average annual precipitation is about 9.5 inches; however, summer flooding was an annual occurrence prior to mining. Reclamation included four permanent impoundments and intervening drainage channels that have prevented flooding of the adjacent town of Gallup. This 300-acre reclaimed site supports a remarkable diversity of plant and animal life. More than 100 vascular plant species have been established including grasses and shrubs, and revegetation carrying capacity has more than doubled. This stable, diverse landscape is a great asset to the Gallup community.

outstanding reclamation and the added diversity it created have resulted in rapid reestablishment of wildlife populations that will provide a stable long-term land use for years to come.

■ Signor Brothers, Babb Creek Operation, Bloss Township, Pennsylvania. Before reclamation, Babb Creek had washed into a late 1800's coal refuse pile and was eroding refuse downstream and causing acid mine drainage. Signor Brothers designed refuse-removal and stream bank protection methods that eliminated 22,000 tons of refuse without harming the creek. Downed trees with the root wads on the stream bank turned Babb Creek away from the refuse and improved the fish habitat. Another innovative technique was the use of large equipment to load the refuse during frozen winter weather. This greatly reduced possible sediment problems.

Today, with reclamation complete, downstream surveys report increased macro-invertebrate and fish populations -- the result, a five-mile stream segment of Babb Creek was removed from the Pennsylvania Department of Environmental Protection's list of impaired streams.

■ Mingo Logan Coal Company, Low Gap Surface Mine No. 2, Wharnccliffe, West Virginia. The Mingo Logan Coal Company used contour and mountaintop removal mining methods that resulted in the postmining land use being transformed into a world-class 18-hole golf course. The 330 acres are characterized by rolling terrain and high mountain meadows. The upper level containing the front 9 holes was constructed within a backfill area. The lower level is built on a valley fill. Special soil handling procedures established the

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Small family cemeteries are common on mine sites. To protect them, the Surface Mining Law requires that mining be kept at least 100 feet from all cemeteries. On this mine in Eastern Kentucky, mining was completed leaving an unmined area surrounding this small community cemetery. As the site was reclaimed, the backfill was graded to provide the premining slope that allows easy access from all sides of the cemetery. In addition, this operator went beyond the requirements of the Law by constructing a gravel lane between the county road and the cemetery to facilitate easy access for local citizens.

■ RFI Energy, Inc., Mine No. 208, Perry Township, Pennsylvania. RFI Energy has reclaimed 202 of its 212 disturbed acres. This unusually timely reclamation has eliminated large disturbed areas and prevented soil erosion. Before mining there were 88 acres of abandoned mine lands with 8,000 feet of highwalls and accompanying spoil piles and mine pits. Today, there is no visible difference between this reclaimed land and that of the virgin mine areas. Approximately 55,000 tons of coal combustion ash was used as a soil amendment resulting in vigorous vegetation in one growing season. When mining began, this site had significantly acidic water discharges from the abandoned mines. As mining progressed through areas where these

discharges originated, the flows improved in quality, and then dried up. This exemplifies mining and reclamation as envisioned by the architects of the Surface Mining Law.

■ Arch of Illinois, Inc., Captain and Denmark Mines, Cutler, Illinois. At its production peak, Arch of Illinois Captain Mine was the largest surface mine east of the Mississippi. When combined with the adjacent Denmark Mine, the reclaimed land area was well over 11,000 acres. Located just west of Pyramid State Park, the reclaimed land has been purchased by the state, making it the largest state park in Illinois. Before the land transfer, reclamation was aimed at recreational/wildlife use. This included a mix of

farmland, lakes, wetlands, and forests. Many of the trees planted in the 1980's are now becoming mature forests. Wildlife became established and the value of this extensive area has continued to grow. This reclaimed site will provide recreational benefits for years to come.

### ***Best-of-the-Best Award***

Since 1996, when the Office of Surface Mining began presenting annual awards for the best reclamation, it was evident that in most cases there were one or two individuals responsible for achieving the success. It was sometimes the mine manager, the reclamation specialist, or in one case a reclamation specialist and a state inspector working together. But in all cases, these people were the linchpin that held the project together and the ones who made the extra effort to ensure achievement of the outstanding reclamation. The Office of Surface Mining recognizes these special individuals to give them credit for their work and to highlight their efforts as a model for others in the mining and reclamation field.

The 2002 award was presented to two individuals responsible for reclamation that has not been easy and required continued testing and use of many new reclamation techniques. In each case the success can be attributed to personal foresight, initiative, and creative implementation--attributes that make these two individuals model examples in both the coal industry and government regulatory environment.

Accomplishing outstanding reclamation is always a balance between production schedules, costs, and desire for the best possible reclamation. The ability to make it all work while achieving award-winning reclamation was exemplified by the 2002 Best-of-the-Best winners, Daniel Fescemyer, Superintendent, and Larry Morrison, Pit Supervisor, RFI Energy, Inc. in Clarion County, Pennsylvania.

### **Special 25th Anniversary Awards**

To commemorate 25 years of mining and reclamation under the Surface Mining Law three mine operations were selected from all of the past award winners as the most successful reclamation under the Surface Mining Law.

■ **Gold Award:** Solar Sources, Inc., Sky-Point Mine, Lynnville, Indiana. This Southern Indiana mining operation has achieved some of the finest examples of mining and reclamation in a complex arrangement of land ownerships and existing uses. The company has worked extensively with land owners and the community to reduce mining impacts. They have continually restored the topography, soil, water, and drainage conditions that will support productive future uses of the land. The high standards of reclamation are a model for the entire mining industry.

■ **Silver Award:** Bellaire Corporation, Indian Head Mine, Beulah, North Dakota. The Indian Head Mine was one of the oldest surface coal mines in the country, producing lignite coal from 1922 - 1992 and disturbing approximately 2,200 acres of land. Today the land is reclaimed and returned to small grain production,

Permanent impoundments included in the reclamation provide farmers with water for livestock and greatly add to the wildlife habitat (below). At this reclaimed site the mine operator has worked with the landowners and incorporated improvements that will provide better conditions for the landowners long-term agricultural land use.



livestock grazing, and haying that significantly exceeds productivity standards. This land resembles its natural surroundings and is virtually indistinguishable from the surrounding landscape. This outstanding operation has continually used innovative mining and reclamation techniques, tested and experimented with new reclamation methods, and completed some of the finest on-the-ground reclamation under the Surface Mining Law.

■ **Bronze Award:** Trapper Mining, Inc., Trapper Mine, Craig, Colorado. Operating since 1977, the Trapper Mine reclamation and erosion control methodologies have consistently produced stable, well vegetated, diverse, and productive

reclaimed lands. The numbers and diversity of wildlife utilizing the reclaimed land is unparalleled in the mining industry. This award winning reclamation is a testament to the company's commitment to long-term stewardship of the land they mine.

Photos of these and other award winning reclamation can be seen at [www.osmre.gov/ocphoto.htm](http://www.osmre.gov/ocphoto.htm).

The success of topsoil handling is measured by the land's crop productivity after reclamation. Although mining at this Amish farm in Southern Indiana went right up to the barnyard, agricultural production was interrupted for only one growing season.

