



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory Program

Administered by the State

of

MARYLAND

for

Evaluation Year 2000

(October 1, 1999, through September 30, 2000)

December 2000

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I. Introduction/Summary

Introduction

The Surface Mining Control and Reclamation Act of 1977 (SMCRA) created the Office of Surface Mining Reclamation and Enforcement (OSM) in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide federal funding for State Regulatory programs that OSM has approved as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Maryland Program and the effectiveness of the Maryland Program in meeting the applicable purposes of SMCRA as specified in section 102. This report covers the period of October 1, 1999, through September 30, 2000. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Pittsburgh Oversight and Inspection Office (OIO).

Summary



Maryland Surface Coal Mining Operation

For the evaluation year, oversight data and studies indicate that the Maryland Program has been effective in meeting the goals of SMCRA. Maryland has conducted a program where active mining sites are, with few exceptions, in compliance with planning, mining, and reclamation standards. Reclamation in particular has been thorough and has proceeded in a contemporaneous fashion. A study of the three most recently issued permits indicates that, on average,

86.8 percent of the affected area has been backfilled and planted at any time. This figure has steadily improved over the last three years¹. Ninety-one percent of sites reviewed exhibit no off-site impacts. Sixty-one percent of Maryland sites are remine sites. Maryland continues to support remining efforts and has amended their program to provide further incentives to remine via their AML enhancement initiative. Thus far, 342 acres of previously mined area have been reclaimed in Maryland.

In addition to these mining and reclamation efforts, the Maryland Department of the Environment (MDE) has undertaken an effort to update and improve information in the Acid Mine Drainage (AMD) inventory, and has continued to increase involvement of the public

¹64 percent in 1998 study and 68 percent in 1999 study.

through programs such as the Appalachian Clean Streams Initiative and Watershed Cooperative Agreements.

This year's evaluation has also identified a number of program areas which should be considered for further improvement. These include a need to: reassess site-specific bond amounts; prepare a plan to address catastrophic bond forfeitures; adopt a statistically valid method of evaluating revegetation success; and address problems identified in relation to preparation and support of written findings required in the approval of permit applications. OSM will review these areas and others which are addressed in the evaluation year 2001 Performance Agreement between MDE and OSM in the upcoming year to assure the continuation of a strong and viable program in the State of Maryland.

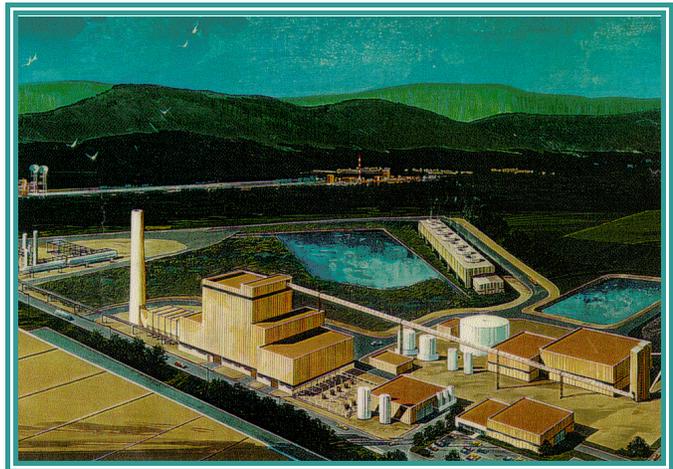
The following sections of this report provide additional detail on program successes and issues identified in the 2000 evaluation year. The following is a list of acronyms used in this report:

ABS	Alternative Bonding System
ACSI	Appalachian Clean Streams Initiative
ALD	Anoxic Limestone Drain
AMD	Acid Mine Drainage
AML	Abandoned Mine Lands
AMLIS	Abandoned Mine Land Information System
AOC	Approximate Original Contour
APS	Allegheny Power System
ATP	Authorization to Proceed
COMAR	Code of Maryland Regulations
EPA	Environmental Protection Agency
LRC	Maryland Land Reclamation Committee
MDE	Maryland Department of the Environment
NEPA	National Environmental Policy Act
OIO	Pittsburgh Oversight and Inspection Office
OSM	Office of Surface Mining Reclamation and Enforcement
SAPS	Successive Alkalinity Producing System
SMCRA	Surface Mining Control and Reclamation Act of 1977
SOAP	Small Operator Assistance Program

II. Overview of the Maryland Coal Mining Industry

Coal mining in western Maryland began in the early 1700's, accounting for some of the earliest coal ever to be mined in the eastern United States. By 1820, several mines were operating in the Eckhart, Frostburg, and Vale Summit areas. Between 1900 and 1918, deep mine production peaked between four and five million tons annually with a historical high of 5.5 million tons in 1907. Most of these mines were developed up-dip to drain water away from the mines. As a result of this, water high in acid and iron drained into streams. Today, acid mine drainage from abandoned coal mines is Western Maryland's most serious water pollution problem. After World War II, underground mining declined in Maryland. By 1977, surface mining accounted for 91 percent of the total production. Since then, production at underground mines has recovered and surpassed surface production, accounting for 81 percent of the total production in 1998². During the 1980's, the amount of coal mined in Maryland fluctuated between three and four million tons, with the greatest production occurring in 1981 (4.5 million tons). Since that time, the tonnage mined has been stable at approximately 3.5 to 4 million tons per year, with production at 4.1 million tons for 1998. This production accounted for .36 percent of total U.S. coal production in 1998³, ranking eighteenth nationally in coal production, and is expected to remain stable because of a long-term underground contract and a new power plant.

The AES Warrior Run Cogeneration facility came on line near Cumberland in Allegany County in 1999. It has a net power output capacity of 180 megawatts which is sold to Allegheny Power Systems (APS) under a 30-year power purchase agreement. The plant was constructed to burn only Western Maryland coal with a clean coal technology using a circulating fluidized bed boiler. Approximately 600,000 tons of coal are burned each year. Limestone used in the Cogeneration process is also

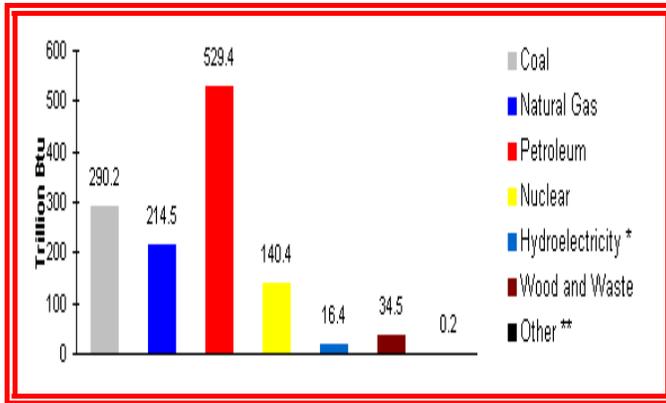


Warrior Run Cogeneration Power Plant

mined locally. In addition to electric generation, the plant produces liquid carbon dioxide (CO₂) which is sold commercially. The industry also hopes to have legislation passed

²The majority of underground coal production in Maryland is generated from one mine employing approximately 250 people.

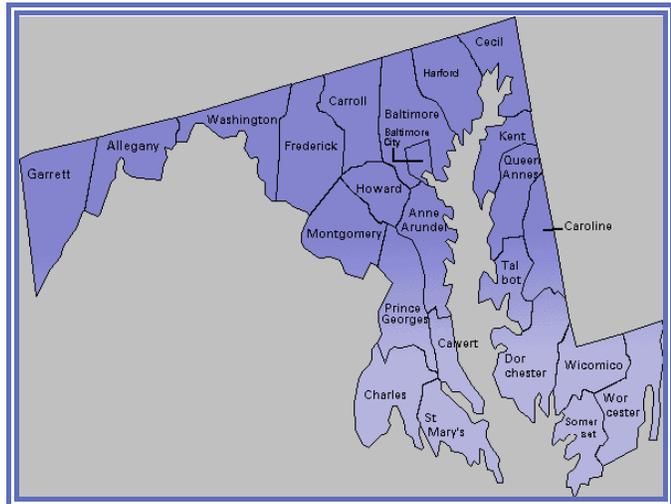
³Source - Energy Information Administration, U.S. Department of Energy



Maryland Energy Usage

(1998 statistics), a number which has been decreasing by an average of 1 percent per year from 1994-1998⁴.

Today coal mining in Maryland is confined to Garrett and the western portion of Allegany County. The topography in this area comprises gently rolling terrain with occasional steep slopes. Maryland State law prohibits surface mining on steep slopes. The Conemaugh and Allegany geologic formations contain five major minable fields or basins in the State. These include the Upper Youghioghny, Lower Youghioghny, Casselman, Upper Potomac, and Georges Creek. The Georges Creek Basin contains the most recoverable coal



Map of Maryland Counties

reserves in the State, followed by the Upper Potomac and the Casselman. There is no mining in the Upper Youghioghny field. The demonstrated reserve base of coal in Maryland is approximately 717 million tons⁴, which ranks Maryland twenty-third nationally.

which will provide economic incentives such as tax credits against certain taxes for any new or expanding coal mining business. Statewide, Maryland consumes approximately 12 million tons of coal per year⁴ and ranks twenty-fifth nationally in total energy consumption. Consumption has increased by an average 2.9 percent per year for the period 1994-1998. Maryland employs approximately 433 coal miners

⁴Source - Energy Information Administration, U.S. Department of Energy.

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

There are numerous opportunities for citizens, the industry, and environmental groups to participate in the Maryland Regulatory and Abandoned Mine Lands (AML) programs. Opportunities for public involvement include outreach efforts, informal public meetings, organizational involvement, and formal regulatory participation.

Outreach

During the evaluation year, Maryland expanded the scope of the Acid Mine Drainage (AMD) Advisory Committee into a newly formed and larger AMD Committee. The new committee incorporates the functions of the advisory committee and, in addition, will be more involved in AML projects and special projects. The expanded committee includes representatives from the coal industry, The University of Maryland's Appalachian Environmental Lab, Maryland Department of Natural Resources, and West Virginia AML Program personnel. Through the expansion of the committee and Maryland's efforts to involve more of the public in AMD and other watershed clean-up activities, local groups such as the Youghiogheny River Watershed Association have become involved in watershed clean-up activities. One project, the Garrett County landfill iron seep, though determined to be non-mining related, is in the process of being corrected as a result of interaction between MDE and local groups. The expanded committee has also been able to secure funding from State, private, and federal sources, including \$80,000 from the OSM Watershed Cooperative Program, to work on eliminating AMD from impacting good quality water at the abandoned Kempton Mine complex.

Maryland continues to develop partnerships with EPA, NRCS, The Canaan Valley Institute, Trout Unlimited and others in an attempt to combine funding resources for solving AMD problems. An example of such a partnership is the Neff Run Project located in Allegany County, Maryland. Neff Run is a tributary to Georges Creek and has been severely impacted by AMD as well as periodic flooding. Through the formation of the Neff Run Work Group, planning, assessment, analysis, design, construction and public outreach activities are being carried out for the purpose of restoring the Neff Run watershed.

A joint MDE/OSM presentation of the Watershed Cooperative Program was made to the Western Maryland Resource Conservation and Development Council Inc. on March 15, 2000. Council members represent soil and water conservation interests in the five westernmost counties of Maryland and work as a nonprofit agency and work cooperatively with other partners in promoting resource conservation and protection.

During the evaluation year, the Maryland Department of Environment sponsored a two and one-half day symposium on the North Branch of the Potomac. The Symposium brought together a broad coalition of stakeholders interested in improving the water quality of the

North Branch. In addition, a tour of current and future project sites was given. The Symposium provided a good forum for public involvement in the Title IV program.

Another example of outreach took place recently in the form of a mine tour designed to educate the young people of Maryland regarding coal mining and reclamation in their State. The tour, organized by OSM, State, and Industry officials, involved 24 Cub Scouts from Dens in Grantsville and Cumberland, Maryland, along with their leaders. They toured a mining operation located near Frostburg, Maryland. Company representatives explained surface mining operations at the site and how the land is reclaimed following the



Cub Scout tour of coal mines in Maryland

removal of coal. The Scouts were shown various aspects of the mining operation including the removal of overburden, saving topsoil, augering operations, blasting, and safety procedures.

The Maryland Bureau of Mines also maintains a web site on the world wide web which offers information on goals, objectives, and accomplishments under the program, as well as opportunities for public input via e-mail.

The OSM Oversight and Inspection Office (OIO) maintains a web site designed to keep the public informed on reclamation and enforcement activities in Maryland by providing access to the Maryland Performance Agreement, the Maryland Annual Report, topical study reports, and a monthly newsletter. The newsletter provides opportunities for public participation and comment on annual work plans, and includes references to *Federal Register* notices of interest to the public, descriptions of oversight activities, and OSM and Department of the Interior press releases . The newsletter is also mailed to representatives of industry, environmental, and citizen groups.

Public Meetings and Hearings

The public is routinely provided opportunities for informal participation through public meetings. One public hearing was held during the period on February 24, 2000, to review three proposed AML projects. Public hearings were also provided as part of the permitting

and bond release process. The State Land Reclamation Committee held public meetings on six occasions to review proposed permits, reclamation plans and AML projects.

Organizational Involvement

Organizational involvement in restoring Maryland's mined lands is taking place at several levels. From local watershed groups to national organizations and State and Federal Agencies, efforts are ongoing to take advantage of partnering opportunities and the benefits they provide. Many organizations were active in the Maryland program during this evaluation period.

Through the joint efforts of local citizens, MDE, the Canaan Valley Institute, OSM and others, the Georges Creek Watershed Association was formed in 1999. The Association is the second watershed association formed in the coal region of Western Maryland. George's Creek is a 19-mile long watershed which empties into the North Branch of the Potomac at Westernport, Maryland. The watershed has been severely impacted by past surface and underground coal mining operations. Mine drainage from abandoned mine sites serves as the major pollution source in the watershed. The Watershed Association formed as a result of local citizens' desire to hasten the clean-up efforts being undertaken in the watershed. During the evaluation year, the Georges Creek Watershed Association combined with the Mill Run Watershed Association, the first watershed group formed in Maryland. The combined organization is involved with several ACSI and Watershed Cooperative Agreement projects, including Neff Run, Mill Run Remediation, and Fazenbaker. The group has partnered with MDE, Trout Unlimited, OSM, Maryland State Highways, Westmar High School, Western Maryland Resource Conservation Development Council, Interstate Commission on the Potomac River Basin, and others to help control AMD.

The American Heritage Rivers program was enacted by Executive Order on September 11, 1997. This program was designed to partner community-based efforts with federal support to improve and protect designated rivers. The Friends of the Potomac, a community-based nonprofit corporation, nominated the Potomac River for inclusion in the program. On July 30, 1998, the Potomac River was designated as one of 14 rivers nationwide as an American Heritage River. The Friends of the Potomac, along with the National Park Service as the lead federal agency, and eight other federal agencies, including OSM, are working together to restore and protect the Potomac River. The designation has meant that OSM and other local, state, federal, and private partners are placing additional emphasis on improving the Potomac River. MDE continues to be part of this effort through increased emphasis on eliminating AMD on the North Branch of the Potomac. Other actions by MDE to improve water quality of the Potomac include the use of lime dosers to treat AMD, implementing a comprehensive investigation of the geology and hydrology of the Kempton Mine complex, and flow monitoring of the Potomac above the community of Kempton to identify sites for potential stream loss due to subsidence in the Kempton Mine.

The Land Reclamation Committee was formed in 1967 through Maryland legislation. The Committee is composed of 13 members representing the mining industry, soil conservation districts, counties, citizens, and State agencies. The Committee studies, recommends, and approves procedures to reclaim, conserve, and replant land affected by coal mining in Maryland. This includes review of mining and reclamation plans, progress reports, and final reports. It establishes plans and procedures, as well as practical guidelines, for prompt and sufficient reclamation, conservation, and revegetation of all lands disturbed by coal mining within the State. The committee meets periodically and OSM attends the meetings. Six Land Reclamation Committee meetings were held during the evaluation year.

Regulatory Participation

Under the Code of Maryland Regulations (COMAR), the public can formally participate in the regulatory program by requesting hearings on the issuance of permits and bond releases, petitioning to have areas designated as unsuitable for mining, requesting inspections of active coal mine operations when there is reason to believe a violation is occurring, requesting pre-blast surveys if living within one-half mile of a permit area, and appealing Departmental decisions through the adjudicatory process.

Impacts/Results of Public Participation

The public has become increasingly involved in the reclamation of abandoned mine sites and elimination of AMD in Maryland, primarily through the ACSI and Watershed Cooperative Agreement Programs. Public conservation groups involved in Maryland projects so far include:

- The Nature Conservancy
- Conservation Fund
- Canaan Valley Institute
- Fresh Water Institute
- Georges Creek Watershed Association
- Shepherd College
- Westmar High School
- Youghiogheny River Watershed Association
- Western Maryland Resource Conservation Development Council
- Interstate Commission on the Potomac River Basin

These groups, along with assistance from Maryland and OSM, have combined to undertake 12 projects totaling more than \$1.6 million in total funding and in-kind contributions. More than 20 miles of AMD-impacted streams will be restored under these projects.

IV. Major Accomplishments/Issues/Innovations in the Maryland Program.

Maryland continues to be successful in achieving the purposes of SMCRA. The Maryland program is firmly established, the public's rights and interests are being protected, mining is being conducted effectively, efficiently, and in an environmentally sound manner, and abandoned mine lands are being reclaimed. In addition to these general measures of success, Maryland has been actively involved in several program improvement initiatives and activities. These are discussed below, along with outstanding issues and concerns which are being addressed in a mutual effort to maintain a high level of quality in the Maryland program.

Title V - Maryland's Title V program has remained effective in the planning, mining, and reclamation of active sites. Maryland continues to work toward refining and improving existing processes and procedures, as well as taking innovative measures in establishing new programs:

Processes - Maryland has made a concerted effort during the evaluation period to improve processes and procedures which have been identified as issues:

Water monitoring - MDE has implemented periodic evaluation of operators' water monitoring results.

SOAP - MDE has increased services under the program and made changes in the application process to assure that rights-of-entry are provided and test boring locations are identified.

Grants Management - MDE has improved grants management by bringing closeout actions up to date.

Database System - Maryland has continued to upgrade and improve their Title V ADP database system, which allows for increased ability to identify issues and trends under the approved program.

Citizen Complaints - MDE has improved the citizen complaint process by assuring those complaints forwarded from other agencies are treated in the same manner and priority as those directly received by MDE.

Inspection Reports - MDE has improved the process by implementing a new ADP system which ensures reports are complete and receipt by the permittee is documented.

Hydrologic Impacts - MDE has revised procedures to more clearly define the level of damage protection provided, and is considering ways to ensure all hydrologic and geologic information is present in the file and application, that supporting data is better referenced, and that impacts of other mining operations are considered.

Remining

During the evaluation period, 61 percent of the oversight inspections with MDE were active or reclaimed remining operations that either involved the “day lighting” of abandoned underground workings or abandoned surface features such as highwalls and spoil materials. On the 11 sites where some form of remining has occurred, five completed sites comprising 342 acres were reclaimed. These acres were comprised primarily of underground mine workings. On the remaining six sites where mining is actively occurring, 564 acres have been affected which involved some form of remining, primarily day lighting. Maryland continues to promote remining operations to the coal industry through various incentives such as reduced bond liability periods and alternative water quality standards for remining operations that impact a pre-existing discharge. During the evaluation period, there were no specific remining permits issued. In July of 2000, an AML Enhancement program amendment was received from Maryland that deals with changes to Maryland regulations by allowing for less than 50 percent funding for abandoned mine reclamation projects in conjunction with planned coal extraction. The Final Rule has been sent for publication in the *Federal Register*. OSM routinely held quarterly meetings with MDE during the evaluation period and discussed various remining issues. OSM will continue to pursue remining with MDE during the next evaluation year with possible new remining incentives being explored.

Program Amendments

During the evaluation period Maryland progressed toward finalization of three program amendments.

The first amendment (MD-581-00) dealt with various aspects of haul road design, certification, and static safety controls. It was submitted to OSM for programmatic and technical review on May 27, 1999. After several revisions, the final rule was published on November 22, 1999. Maryland is in the process of promulgating regulations.

The next amendment, the AML Enhancement Rule (MD-582-00), was submitted to OSM on July 10, 2000. The proposed rule allows for AML projects to be funded with less than 50 percent federal dollars. OSM has approved the amendment, completed the comment period, and submitted the amendment for final publication in the *Federal Register*.

The third amendment, a “various issues” amendment (MD-577-01), was required as part of a 30 CFR 732 action. It was submitted to OSM on September 24, 1999, and published in the *Federal Register* on April 28, 2000. An issue dealing with inspection frequency at abandoned mine sites and the addition of a definition for these sites resulted in the proposed amendment being republished in the *Federal Register* for 15 days. Proposed regulations were published in the *Federal Register* on October 4, 2000. Two issues dealing with technical standards for the design of siltation structures were not included in the original submission, but have now been submitted as an informal amendment (SPATS # MD-048) and are currently under review by OSM. The proposed changes deal with the use of technical standards contained in Natural Resource Conservation Service (NRCS) Technical Release No. 60.

On August 22, 2000, OSM sent a 732 letter (MD-583-00) to Maryland outlining changes required to their permanent regulatory program regarding Valid Existing Rights (VER). MDE responded to the letter by requesting additional time to submit information pending the results of a lawsuit challenging OSM’s final rules. OSM is drafting a response to MDE.

Four other program amendment issues remain to be finalized in Maryland. These include liability insurance, EPACT subsidence regulations, ownership and control, and actions by the Maryland legislature to ensure that each member of the Land Reclamation Committee (LRC) files a statement of employment and financial interest to be no less effective than the federal rule.

During the 2001 evaluation year, OSM will be updating the status of all current program amendments in Maryland, determining the importance of each amendment, and developing a submission date for each outstanding amendment in coordination with the State.

Title IV - With lessening coal reserves in Maryland and the resultant decrease in coal mining activities, Title IV abandoned mine land reclamation activities have taken on an increased role. Maryland has made good use of programs designed to reclaim land damaged by past mining practices and to alleviate the associated AMD problems. The following represents some of the accomplishments under the Title IV program.

Appalachian Clean Streams Initiative

Funding for ACSI projects in Maryland began in 1997 with the receipt of \$100,000. Additional funds were received in 1998, 1999, and 2000 to work on water-related AMD problems. In addition to the \$482,413 of OSM funding allocated to Maryland to date, other state, federal, and private groups have committed funding in the amount of \$420,838, as well as in-kind contributions.

The Elk Lick II, Elk Lick III, and Glotfelty AMD projects were completed during the review period. All three projects were funded in part or in whole by the Appalachian Clean Streams Initiative.



Geese at settling pond - Elk Lick II

The Elk Lick II project involved the construction of an additional Alkalinity Producing Cell and an Oxidizing/Settling Pond. The additional cell will work in conjunction with the existing cell to treat an average of 40 gallons of AMD per minute.

The Elk Lick III AMD project involved the construction of two Alkalinity producing Cells, an Oxidizing/settling pond and a wetland. The system will treat an average of 40 gallons of AMD per minute.



Elk Lick III AMD Project



*Created Wetland showing air injection windmill
Glotfelty ACSI Project*

The Glotfelty site was identified as one of the top four contributors of acid and metals to Cherry Creek as well as impacting five acres of pristine wetland immediately adjacent to the discharge. The 25 discharge of gallons per minute entered an unnamed tributary for a short distance before discharging to the mainstream of Cherry Creek, with a pH of 2.5, 60 mg/l of iron, 0.5 mg/l of aluminum, and a net acidity of 270 mg/l. The adverse impacts from this drainage were documented on the native biota and water quality for more than one

mile downstream. The Glotfelty Project design was based on the evaluation of the water quality parameters. Construction consisted of a series of alkaline producing systems (an ALD and a SAPS) separated by metal oxidation ponds and treatment wetlands, and final discharge was into the natural wetlands along Cherry Creek. To promote increased precipitation of the iron, a windmill-powered air pump was installed at the oxidation pond to quickly and thoroughly aerate the discharge. The operation of the windmill has resulted in a better discharge from the oxidation pond, which reduces system flushing and maintenance of the entire system. The wetlands at the site and the treatment system banks were seeded with Red Top (*Agrostis alba*), Rough-stalked Bluegrass (*Pog trivialis*), Wild Millet (*Echinochloa crysgalli*), and Switch Grass (*Panicum virgatum*). Post-construction water sampling has documented that the treatment system discharges to Cherry Creek net alkaline with a pH of at least 6.0, iron concentrations between three and 6 mg/l, and aluminum less than 0.1 mg/l. The improved discharge of net alkaline, low metal water has allowed one mile of Cherry Creek and several acres of *Sphagnum* spp. bog wetland to begin recovery from decades of AMD impacts.

Three additional ACSI projects are planned for an award during the next evaluation year. These include the Potomac Hill Run AMD, the Georges Creek Elementary School AMD, and the Coney Cleaners AMD Projects. The Coney Cleaners project, which will treat approximately 30 gallons per minute flow of AMD discharge, will complement plans by other environmental groups that are underway for development and preservation of the historic Lonaconing



*Coney Cleaners ACSI Project
(photo courtesy of Frank Frideczky)*

Silk Mill and Coal Heritage Trail project. This project is adjacent to the Coney Cleaners project. The Coal Heritage Trail project involves the Maryland Historical Trust, Maryland Scenic Byways, C&O Canal National Historic Park, Brunswick RR, Friends of the Potomac, and the National Park Service as part of the Potomac American Heritage River Initiative.

Under the ACSI program, The Georges Creek Watershed Association was selected as one of the sponsors for the Summer Watershed Internship Program. An intern was selected to work for the Association during the summer of 2000. The intern carried out such duties as water sampling and stream monitoring, meeting coordination, watershed planning, and public awareness for the Association. In coordination with the State of Maryland Abandoned Mine Lands Division, the Association can develop future AMD projects using information and data collected by the intern. Four additional ACSI-FUNDED projects were approved during the evaluation year. These projects include an amendment to the Mill Run AMD Remediation project, the Fazenbaker project, the Kempton man shaft project, and the Teets project. Various partners exist for all of the planned ACSI projects. These partners provide either funding or volunteer and in-kind services.

The following table summarizes project accomplishments under the ACSI in Maryland since its inception in 1997:

MARYLAND ACSI PROJECT STATUS

Project/ State	Status as of:	Miles of Stream * (miles)		Total Estimated Cost	OSM Funding		Planned Partners' Contributions*		OSM/ Partners Cumm. Total to date
		To be Restored	Completed		by FY	Cumm. to date			
Glotfelty_ (FY97) completed	8/24/00	4	4	\$81,618	\$36,618	\$36,618	Environmental Protection Agency	\$45,000	\$81,618
							Natl. Mine Land Rec. Ctr. - Tech. Suppt.	in-kind	
Potomac Hill Run (FY99)	8/24/00	2	0	\$150,000	\$25,000	\$25,000	Small Streams/Estuaries	\$75,000	\$150,000
							Title IV AML funds	\$50,000	
Elk Lick III (FY00) completed	6/8/00	2	2	\$54,599	\$20,000	\$20,000	Maryland Small Creek and Estuaries	\$45,000	\$54,599
							U.S. DOE	\$5,000	
							Garrett County	\$5,000	
Coney AMD (FY00)	9/30/99	1	0	\$86,000	\$21,500	\$21,500	Maryland Small Creeks/Estuaries	\$64,500	\$86,000
							Allegany County	in-kind	
Elk Lick II (FY00) completed	6/8/00	2	2	\$62,199	\$21,861	\$21,861	Maryland Small Creeks/Estuaries & MDE	\$40,338	\$62,199
Rock Lodge (FY99)	8/24/00	.5	0	\$80,000	\$40,000	\$40,000	EPA	\$40,000	\$80,000
Neff Run (FY00)	6/8/00	2	0	\$131,000	\$100,000	\$100,000	MD State Highways	\$16,000	\$151,000
							Project Impact	\$5,000	
							Trout Unlimited	\$10,000	
							Maryland Small Creeks/Estuaries	\$20,000	
TOTAL		13.5	8	\$645,416		\$264,979		\$420,838	\$665,416

Watershed Cooperative Agreement Program

The Watershed Cooperative Agreement Program, an offshoot of the ACSI program, was developed by OSM in 1999 as a means of directly funding not-for-profit groups who are interested in eliminating AMD. Maryland has become an active participant in the program. Since its inception, Maryland has partnered with such groups as The Nature Conservancy, The Conservation Fund, The Georges Creek Watershed Association, Canaan Valley Institute, and other private, state, and federal groups to address AMD problems. In 1999, Maryland and its partners received \$145,000 in funding to do the Mill Run Diversion Well Project and the Everhart Seep Project. The Mill Run Project is expected to go to construction during the fall of 2000. The Everhart Project

is currently under construction. Total combined funding for both of these projects from all partners was \$467,800. During this evaluation year, three additional projects were funded through the combined efforts of the Georges Creek Watershed Association, The Western Maryland Resource Conservation and Development Council, Inc., The State of Maryland, The Youghiogheny River Watershed Association and many others. Funding from the Watershed Cooperative Program

amounted to \$ 213,000. An additional \$ 304,000 was obtained from other watershed partners to fully fund the projects. The three projects include the Fazenbaker AMD treatment project in Allegany County, and the Teets AMD/Pyrolucite project and Kempton Man Shaft sealing project, both in Garrett County. The following table summarizes project accomplishments under the Watershed Cooperative Agreement Program in Maryland since its inception in 1999:



Garrett College Volunteer - Everhart Project

MARYLAND WATERSHED COOPERATIVE AGREEMENT PROJECT STATUS

Project/ State	Status as of:	Miles of Stream * (miles)		Total Estimated Cost	OSM Funding		Planned Partners' Contributions*	OSM/ Partners Cumm. Total to date	
		To be Restored	Completed		by FY	Cumm. to date			
Everhart Seep (FY99)	9/30/99	2.5	0	\$182,000	\$80,000	\$262,000	MDE	\$57,500	\$182,800
							The Nature Conservancy	\$26,700	
							GCC	\$18,600	
Mill Run Remediation (FY99)	9/30/99	3	0	\$290,000	\$65,000	\$65,000	Conservation Fund	in-kind	\$290,000
							Canaan Valley Institute	\$225,000	
							Fresh Water Institute	in-kind	
							Mill Run Watershed	in-kind	
							MDE/ Shepherd College	in-kind	
Teets	10/26/00	.5	0	\$190,000	\$80,000	\$80,000	6 partners including WMRC&D, Youghiogheny River Watershed Association, MDE, Garrett Soil Conservation District, Buffalo Coal Company, Garrett County Health Dept.	\$110,000	\$190,000
Kempton	10/26/00	1	0	\$206,000	\$80,000	\$80,000	8 partners including MD DNR Power Plant Research Program, Buffalo Coal, Mettike, MDE, Western Maryland Resource Conservation Development Council	\$125,500 including in-kind	\$205,500
Fazenbaker	10/26/00	.5	0	\$121,300	\$53,000	\$53,000	8 partners including Georges Creek Watershed Association, MDE, OSM, Westmar High School, Western Maryland Resource Conservation Development Council, and Interstate Commission on the Potomac River Basin	\$63,300	\$121,300
								\$5000 in-kind	
TOTAL		7.5	0	\$989,300		\$540,000		\$631,600	\$989,600

Abandoned Mine Land Reclamation

During the 2000 evaluation year, the Maryland AML division completed work on two Title IV reclamation projects and one Title V bond forfeiture reclamation project. In addition, AML program staff have been updating the inventory of AML features in Maryland and entering data into the national Abandoned Mind Lands Information System (AMLIS) database. They have entered updated and new data for more than 300 sites.

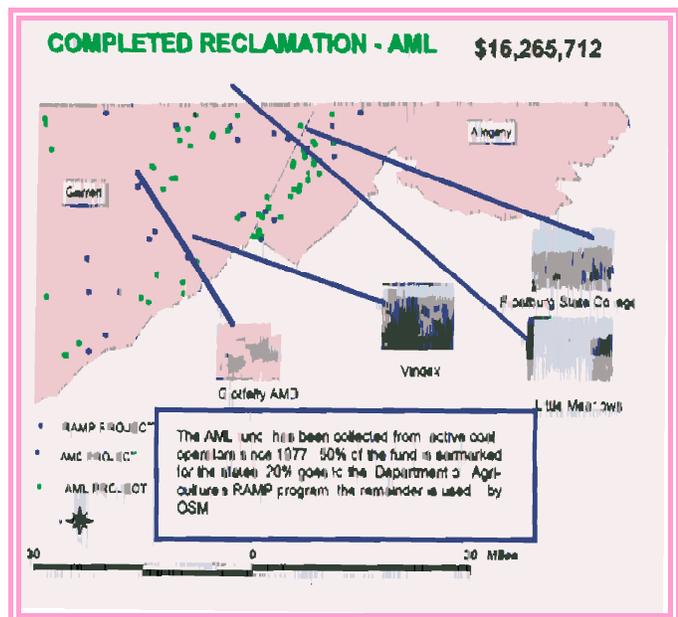


Chestnut Ridge AML Reclamation Project

The Chestnut Ridge project in Garrett County involved the backfilling of a 20-acre abandoned surface mine with an abandoned highwall and a hazardous water body at a cost of \$98,000.

The Kyle Hill Water Supply Replacement Project involved the extension of a public water supply to provide a potable source of water to 27 residences and an elementary school. The project covered a six-acre area and was done at a cost of \$437,000.

The AML division also completed reclamation on a bond forfeiture site consisting of 57 acres of highwall, acid spoil, and AMD. The site has been reclaimed at a cost of \$408,000. An additional eight acres of the project will be reclaimed in the spring of 2001. The Division incorporated special spoil handling and limestone alkaline additions to the backfill to help prevent any post-reclamation discharges. The site is included in the National AMD Inventory. Follow-up activities in the next evaluation year will be done to ascertain whether the site can be removed due to MDE abatement actions.



Courtesy - Frank Frideczky

Maryland submitted six Title IV requests for Authorizations To Proceed (ATPs) to OSM for review and approval during the evaluation period. The requests were done under NEPA requirements for federally funded AML projects. Three of the reviews were done for regular Title IV projects and the other three were done for projects to be done under the ACSI program. With the exception of one project, all of the proposed projects involved some form of AMD treatment. AMD continues to be Western Maryland's major source of water pollution. Two of the proposed projects have been completed, two are under construction, and the two remaining projects are expected to be completed in 2001.

V. **Success in Achieving the Purposes of SMCRA as Measured by the Number of Observed Off-Site Impacts and the Number of Acres Meeting the Performance Standards at the Time of Bond Release.**

To further the concept of reporting end results, OSM is collecting the findings from performance standard evaluations for a national perspective in terms of the number and extent of observed off-site impacts, and the number of acres that have been mined and reclaimed that meet the bond release requirements for the various phases of reclamation. Individual topic reports which provide additional details on how the following evaluations and measurements were conducted are available in the Pittsburgh Oversight and Inspection Office.

Off-Site Impacts

During the evaluation period, OSM conducted a study to assess the number and severity of off-site impacts occurring as a result of surface and underground mining operations⁵. OSM selected 22 sites for the study. Of the 22 sites, 20 sites (91 percent) exhibited no off-site impacts. The remaining two sites had off-site impacts involving encroachment outside the permit boundary and sediment flowing off site through a breached diversion ditch. In addition to the 22 joint MDE/OSM inspections conducted as part of the study, MDE conducted additional non-joint inspections in which four additional off-site impacts were observed. These impacts were associated with a sludge line which broke allowing coal fines to leave the permit area and enter a small stream. In another case, a mine operator encroached upon a prohibited area next to a high tension power line. The remaining two instances were related to discharges from a sediment pond that did not meet effluent standards. In each case, MDE took an enforcement action and the violation was abated and the violation terminated. Table 4 summarizes the off-site impacts observed. No programmatic deficiencies were noted in either allowing impacts to occur or in mitigating impacts following occurrence.

Reclamation Success

OSM conducted a study to evaluate the effectiveness of ensuring successful reclamation on lands affected by surface coal mining operations⁶. Four reclamation parameters were evaluated; land form/approximate original contour (AOC), land capability, hydrologic reclamation, and contemporaneous reclamation. The study revealed that reclamation is

⁵Off-Site Impacts, Evaluation Year 2000; Available upon request from the Pittsburgh OIO Office

⁶Maryland Bond Release Study, Evaluation Year 2000; Available upon request from the Pittsburgh OIO Office.

generally effective and successful under the Maryland State Program. All nine evaluations met all criteria for AOC, hydrologic reclamation, and contemporaneous reclamation. Six of the nine evaluations met the criteria for land capability. One site had not replaced all topsoil, one site had not established successful vegetation, and one site had not met criteria for leaving a permanent impoundment and road. During OIO's evaluation for Maryland bond release activities, as indicated in Table 5, approximately 73 percent of the bond released was for phase

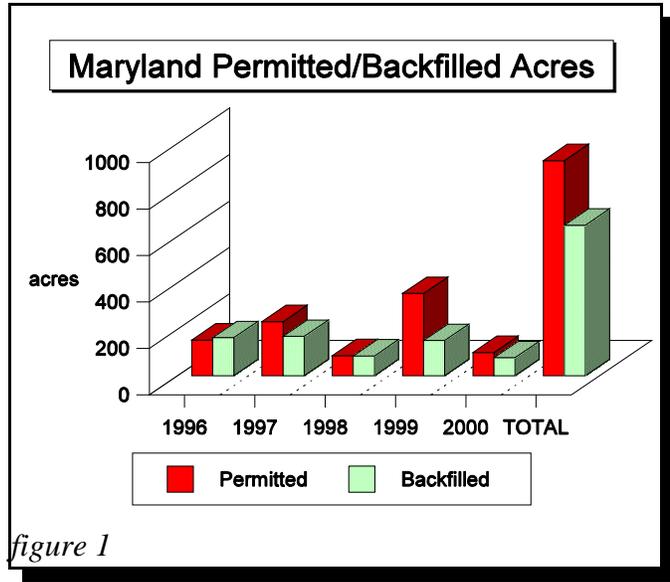


figure 1

II (25percent) and phase III (48 percent). Twenty-seven percent of bond released was for phase I. This imbalance is expected partly because, under Maryland's bonding system, phase I bond does not cover the entire permit area as phases II and III do. Rather, it covers only the disturbed area, then "floats" to a new area after backfilling and grading on the disturbed area are completed. Thus, phase I bond is released only for the last parcel disturbed, rather than for the entire permit area. Figure 1 shows that newly permitted acreage has outpaced phase I release, backfilled acreage over the last five years.

Customer Service

OSM evaluates customer service annually as part of our oversight of surface coal mining and reclamation programs. During the evaluation year, OSM reviewed⁷ Maryland's customer service in responding to citizen complaints involving the use of explosives on mine sites. The objectives of the study were to evaluate MDE's response to citizen blasting complaints to ensure compliance with the Maryland-approved program and to look at the technical aspects of how blasting complaints are reviewed. The study revealed that Maryland is in compliance with all requirements of the approved program for the three complaints received.

⁷Maryland Blasting Complaint Study, May 2000; Available upon request from the Pittsburgh OIO Office

VI. OSM Assistance

Upon request, OSM provides various types of assistance to Maryland in the form of technical, managerial, financial, and training assistance. OSM provided the following assistance to Maryland during the evaluation period:

Financial Assistance

As shown in table 9 (Appendix A), OSM awarded \$477,333 in Title V regulatory assistance funding during fiscal year 2000. This is in addition to the \$661,959 awarded for the Title IV abandoned mine lands reclamation program and \$35,000 for the Small Operator Assistance Program. From program inception to the end of fiscal year 2000, OSM has granted Maryland approximately \$32.1 million net awards. Of this amount, \$.5 million was for the Small Operator Assistance Program (SOAP), \$6.9 million for regulatory operations, and \$24.7 million for abandoned mine land reclamation projects.

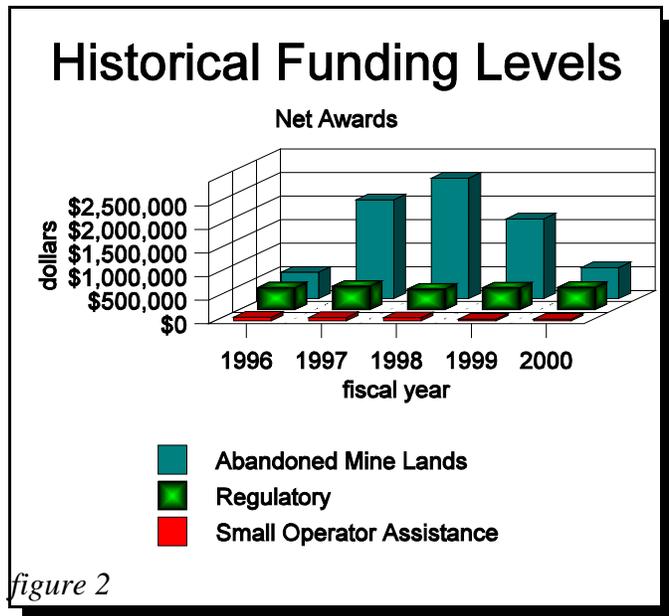
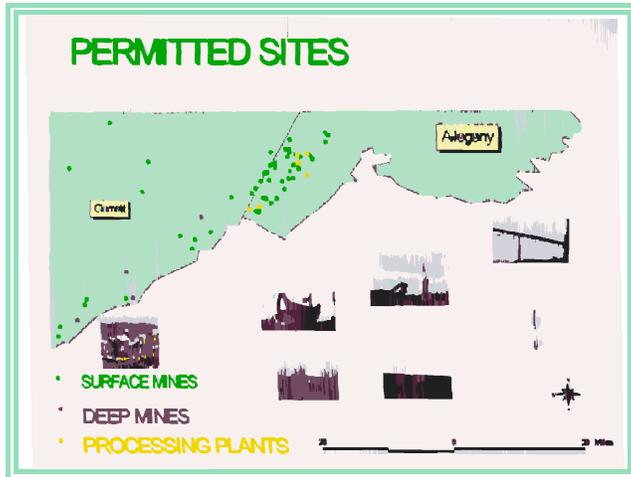


figure 2

Figure 2 shows comparative grant awards for the three program areas over the last five fiscal years.

Technical Assistance

OSM conducted two technical assistance investigations for Maryland during the review period. Both investigations involved mine subsidence and whether subsidence had occurred as a result of longwall mining. Both investigations were done with the assistance of the Program Support Division of the Appalachian Regional Coordinating Center. The one investigation determined that mining had not resulted in damage to the dwelling. In the second case, it was determined that mining had caused damage to the dwelling. The company involved began corrective measures with the landowners.



Maryland Atlas Map (courtesy of Frank Frideczky)

OSM provided another form of assistance through the development of a comprehensive atlas of coal-related activities in the State of Maryland. The atlas incorporates map views of active mine sites, abandoned sites and acid impaired streams. The atlas was produced in conjunction with records provided by the State of Maryland and the OSM Division of Technical Support. A copy of the report was provided to the State.

In addition, OSM conducted four Federal Reclamation Program emergency investigations during the period. Two of these emergencies have been eliminated through the implementation of Federal projects. One of the projects was later determined to be non-mining related after further technical investigation. The last project, while mining related, will be corrected by the state.

VII. General Oversight Topic Reviews

In addition to the studies to assess off-site impacts, evaluate the effectiveness in achieving successful reclamation, and review the handling of blasting complaints, OSM conducted four additional studies during the evaluation period per the OSM/MDE evaluation year 2000 work plan. OSM will work with MDE in the next evaluation period to resolve issues raised as a result of these studies:

Revegetation Success Evaluation Tools

OSM conducted a study to evaluate MDE methodologies used in determining the success of phase II and phase III revegetation for compliance with Maryland's approved mining and reclamation program⁸. MDE currently uses a visual estimating technique for evaluating the success of phase II and phase III vegetation in Maryland. The study found that this technique has been successful in determining whether or not to release bond on sites with either heavy or sparse ground cover⁹. However, visual estimating techniques are neither statistically valid, repeatable, nor highly accurate. Both federal and State regulations require that standards of success be judged using, ". . . a 90 percent statistical confidence interval." Because a visual estimating technique cannot be used to meet this requirement, it was determined that Maryland should adopt statistically valid measurement techniques such as those referred to and/or demonstrated in the study.

Permit Findings

OSM conducted a study during the evaluation period to determine whether Maryland makes written findings required for permit issuance under the approved Mining and Reclamation Program, and to assess the level of documentation of the findings¹⁰. Study data show that Maryland generally makes and supports required written findings. The only findings which were not made and/or fully supported applied to permits having site-specific conditions. These findings apply to existing structures, augering operations, and remining permits. Two of these involving augering and remining included neither the State regulation which requires the finding nor the finding itself in the permit file. The third involving existing structures

⁸Maryland Revegetation Evaluation Techniques, Evaluation Year 2000. Copies available from the Pittsburgh OIO Office upon request.

⁹As determined by retesting of sample sites using statistical sampling methods

¹⁰Maryland Permit Findings, Evaluation Year 2000. Copies available from the Pittsburgh OIO Office upon request.

included a State regulation which required the finding, but the finding itself was absent. Also, Maryland does not provide a rationale connecting support to a finding. This absence of specific findings and support makes it difficult to determine whether a permitting decision is arbitrary or capricious as defined by the Administrative Procedure Act¹¹. To meet the “arbitrary and capricious” standard, the Regulatory Authority must examine relevant data, articulate a satisfactory explanation for its action, and include in the satisfactory explanation a rational connection between the facts found and the choice made as part of the decision-making document.

Reclamation Liability Review

On December 16, 1998, Winner Brothers Coal Company filed a Plan for Reorganization under Chapter 11 bankruptcy procedures. This company’s holdings represent 23 percent of the total number of permits in Maryland. To determine the impact, if any, on the existing bond pool if the State was required to perform reclamation work at the sites, OSM conducted a study during the evaluation period¹². The study focused on the bonding and reclamation liability of 15 permits operated by Winner Brothers. A team of Maryland and OSM employees conducted the study. The team gathered data on the permit status, reclamation liability status, historic production, and violation history of the sites. Based on reclamation cost estimates conducted in March 1999, Maryland’s alternative bonding system¹³ was insufficient to reclaim all Winner Brothers Coal Company and Masteller Coal permits. The deficit at that time was estimated at \$356,573. Subsequent to the March estimate, Winner Brothers entered into a consent agreement with Maryland to protect the public interest and ensure reclamation of all permits. Included in the Consent Agreement was an Asset Purchase Agreement between Winner Brothers and United Energy, Inc. to transfer ownership, control, and reclamation responsibility of eight Winner Brothers permits to United, including two Winner Brothers permits carrying the greatest reclamation liability. As a result, it is now estimated that site-specific bond alone is sufficient to cover the cost of reclamation of the remaining Winner Brothers permit sites with no impact to the bond supplement pool.

¹¹5 U.S.C. §§ 706(2)(A)

¹²Maryland Reclamation Liability Review, July 2000

¹³Site-specific bond plus bond supplement pool

Performance Monitoring Study

OSM conducted a study during the evaluation period¹⁴ to assess the impact of planning, mining, and reclamation activities on the effectiveness of the Maryland Program in meeting the goals of the SMCRA. Twenty permitting, mining, and reclamation standards on eighteen permit sites were evaluated for compliance with MDE program requirements. All sites were in compliance with all standards, with the following exceptions:

Bond Coverage - One permit included a disturbance outside the bonded area where diversion ditches were being installed. The off-site impact was considered minor and MDE wrote a notice of violation on May 10, 2000, for correction by the operator. The operator took corrective measures and the violation was terminated on May 16, 2000.

Drainage Control Treatment, Monitoring, and Certification - One permit exhibited off-site damage as a result of a breached diversion ditch which occurred as a result of a major storm event. This resulted in several hundred tons of spoil and coal materials traveling off-site into a wooded area and beyond, impacting a soccer field, maintenance building, and public street. The impact was evaluated as a major hydrologic and encroachment impact to land, moderate to structures, and minor to water. MDE wrote a notice of violation requiring the operator to repair the damages and diversion. A follow-up inspection noted that most repairs had occurred. Another permit exhibited minor off-site sedimentation as a result of a major storm event which exceeded ten-year storm design requirements for sediment structures. In this instance, the operator was given an opportunity to correct sedimentation problems. A follow-up inspection revealed that the operator had taken corrective measures.

Resoiling - One site exhibited a failure to redistribute two topsoil piles. The entire area, including soil piles, included well-established vegetative cover. MDE determined that spreading the remaining topsoil would cause more environmental harm than benefit, and subsequently approved phase III reclamation. OSM concurred that no further action was necessary.

Hydrologic Quantity, Quality, and Recharge Capacity Restoration - One permit did not have required quarterly ground water flow measurements submitted for five sites. MDE issued a notice of violation for this failure. Another permit had a seep exhibiting high iron and low pH. The seep required treatment via an anoxic limestone drain prior to discharge from the permit. This seep is preventing release of bond on this site. A third permit did not have required flow recorded for seven of the eight monitoring points. MDE issued a notice of violation. Historically Maryland has exhibited an approximate 99 percent compliance rate with the standards evaluated by OSM.

¹⁴Maryland Performance Monitoring Study, Evaluation Year 2000. Copies available from the Pittsburgh OIO Office upon request.

The Maryland program is effectively meeting the reclamation objectives of SMCRA. The Oversight and Inspection Office looks forward to continuing a partnership with Maryland in achieving the mutual goals of protecting citizens and the environment from the adverse effects of coal mining, while recognizing the need for coal production in meeting the nation's energy needs.

APPENDIX A

These tables present data pertinent to mining operations and State and Federal regulatory activities within Maryland. They also summarize funding provided by OSM and Maryland staffing. Unless otherwise specified, the reporting period for the data contained in all tables is October 1, 1999, to September 30, 2000. Additional data used by OSM in its evaluation of Maryland's performance is available for review in the evaluation files maintained by the Pittsburgh OIO Office.

TABLE 1

Coal Production (Millions of short tons)			
Period	Surface mines	Underground mines	Total
Coal production ^A for entire State:			
Annual Period			
1997	0.9	3.3	4.2
1998	0.8	3.3	4.1
1999	0.7	3.2	3.9
	2.4	9.8	12.2

^A Coal production as reported in this table is the gross tonnage which includes coal that is sold, used or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.

TABLE 2

Inspectable Units As of September 30, 2000													
Coal mines and related facilities	Number and status of permits								Insp. Unit ^D	Permitted acreage ^A (hundreds of acres)			
	Active or temporarily inactive		Inactive Phase II bond release		Abandoned		Totals			IP	PP	Total	
	IP	PP	IP	PP	IP	PP	IP	PP					
STATE and PRIVATE LANDS REGULATORY AUTHORITY: STATE													
Surface mines	0	47	0	6	0	0	0	53	0	0	51	51	
Underground mines	0	4	0	0	0	0	0	4	0	0	0.8	0.8	
Other facilities	0	5	0	0	0	0	0	5	0	0	0.1	0.1	
Subtotals	0	56	0	6	0	0	0	62	0	0	51.9	51.9	
FEDERAL LANDS REGULATORY AUTHORITY: STATE													
Surface mines	0	0	0	0	0	0	0	0	0	0	0	0	
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0	
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotals	0	0	0	0	0	0	0	0	0	0	0	0	
ALL LANDS^B													
Surface mines	0	47	0	6	0	0	0	53	0	0	51	51	
Underground mines	0	4	0	0	0	0	0	4	0	0	1	1	
Other facilities	0	5	0	0	0	0	0	5	0	0	0	0	
Totals	0	56	0	6	0	0	0	62	0	0	52	52	
Average number of permits per inspectable unit (excluding exploration sites)											NA		
Average number of acres per inspectable unit (excluding exploration sites)											NA		
Number of exploration permits on State and private lands:					1		On Federal lands:					0	C
Number of exploration notices on State and private lands:					3		On Federal lands:					0	C
<p>IP: Initial regulatory program sites. PP: Permanent regulatory program sites.</p> <p>^A When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.</p> <p>^B Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.</p> <p>^C Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.</p> <p>^D Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.</p>													

TABLE 3

State Permitting Activity As of September 30, 2000												
Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres ^A	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	5	2	100	1	0	0	0	0	0	6	2	100
Renewals	2	3	92	0	0	0	0	0	0	2	3	92
Transfers, sales and assignments of permit rights	7	9		0	1		0	0		7	10	
Small operator assistance	1	0		0	0		0	0		1	0	
Exploration permits	1	0		0	0		0	0		1	0	
Exploration notices ^B		3			0			0			3	
Revisions (exclusive of incidental boundary revisions)		17			0			0			17	
Incidental boundary revisions		5	56		1	5		0	0		6	61
Totals	16	39	248	1	2	5	0	0	0	17	41	253
OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions _____												
^A Includes only the number of acres of proposed surface disturbance.												
^B State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.												

TABLE 4

Off-Site Impacts														
DEGREE OF IMPACT		RESOURCES AFFECTED												Total
		People			Land			Water			Structures			
		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major	
TYPE OF IMPACT	Blasting													0
	Land Stability													0
	Hydrology							2						2
	Encroachment				2									2
	Other					1			1					2
	Total	0	0	0	2	1	0	2	1	0	0	0	0	0
Total number of inspectable units: _____														
Inspectable units free of off-site impacts: _____														
OFF-SITE IMPACTS ON BOND FORFEITURE SITES														
DEGREE OF IMPACT		RESOURCES AFFECTED												Total
		People			Land			Water			Structures			
		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major	
TYPE OF IMPACT	Blasting													0
	Land Stability													0
	Hydrology													0
	Encroachment													0
	Other													0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Total number of inspectable units: 62														
Inspectable units free of off-site impacts: 59														

Refer to the report narrative for complete explanation and evaluation of the information provided by this table.

TABLE 5

Annual State Mining and Reclamation Results		
Bond release phase	Applicable performance standard	Acreage released during this evaluation period
Phase I	<ul style="list-style-type: none"> ● Approximate original contour restored ● Topsoil or approved alternative replaced 	77.8
Phase II	<ul style="list-style-type: none"> ● Surface stability ● Establishment of vegetation 	71
Phase III	<ul style="list-style-type: none"> ● Post-mining land use/productivity restored ● Successful permanent vegetation ● Groundwater recharge, quality and quantity restored ● Surface water quality and quantity restored 	138
	Bonded Acreage Status^A	Acres
	Total number of bonded acres at end of last review period (September 30, 1999) ^B	6253
	Total number of bonded acres during this evaluation year	6368
	Number of acres bonded during this evaluation year that are considered re-mining, if available	76
	Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7)	0
^A Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations. ^B Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).		

TABLE 7

State Bond Forfeiture Activity (Permanent Program Permits)			
	Number of Sites	Dollars	Disturbed Acres
Bonds forfeited as of September 30, 1999 ^A	4	\$633,060	217
Bonds forfeited during EY 2000	0	\$0	0
Forfeited bonds collected as September 30, 1999 ^A	4	\$633,060	217
Forfeited bonds collected during EY 2000	0	\$0	0
Forfeiture sites reclaimed during EY 2000	2	\$663,451 ^B	56
Forfeiture sites repermited during EY 2000	0		0
Forfeiture sites unreclaimed as of September 30, 2000	2		161
Excess reclamation costs recovered from permittee	0	0	
Excess forfeiture proceeds returned to permittee	0	0	
^A Includes data only for those forfeiture sites not fully reclaimed as of this date. ^B Cost of reclamation, excluding general administrative expenses.			

TABLE 8

State Staffing (Full-time equivalents at end of evaluation year)	
Function	EY 2000
Regulatory Program	
Permit review	3.1
Inspection	5.8
Other (administrative, fiscal, personnel, etc.)	4.6
SUB-TOTAL	13.5
AML Program	4.7
TOTAL	18.2

TABLE 9

Funds Granted to Maryland by OSM (Millions of dollars) EY 2000		
Type of Grant	Federal Funds Awarded	Federal Funding as a Percentage of Total Program Costs
Administration and enforcement	\$0.477333	50
Small operator assistance	\$0.035000	100
Totals	\$0.512333	

APPENDIX B

State Comments

The Maryland Bureau of Mines had no comments to the EY2000 Evaluation Report.

Disposition of Comments

The Maryland Bureau of Mines had no formal comments on the annual report to dispose.