



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Summary Report

for the

Regulatory Program

Administered by the State

of

MARYLAND

for

Evaluation Year 2001

(October 1, 2001, through September 30, 2001)

November 2001

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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, 2000, through September 30, 2001. 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



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,

75 percent of the affected area has been backfilled and planted at any time¹. Ninety-five percent of sites reviewed exhibit no off-site impacts.

¹ 64 percent in 1998 study, 68 percent in 1999 study, 87 percent in 2000 study.

In addition to mining and reclamation efforts, the Maryland Department of the Environment (MDE) has continued to involve the public through programs such as the Appalachian Clean Streams Initiative and Watershed Cooperative Agreements.

This year's evaluation has also identified issues relating to resolving outstanding findings contained in previous topical studies and finalizing program amendments that are in various stages of review. OSM will work with MDE to resolve these issues and others addressed in the evaluation year 2002 Performance Agreement between MDE and OSM. This will help ensure the continuation of a strong and viable program in the State of Maryland.



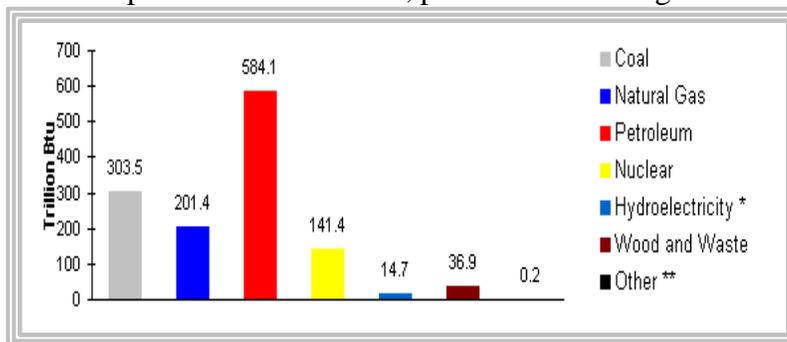
The following sections of this report provide additional detail on program successes and issues identified in the 2001 evaluation year. The following is a list of acronyms used in this report:

ACSI	Appalachian Clean Streams Initiative
AMD	Acid Mine Drainage
AML	Abandoned Mine Lands
AMLIS	Abandoned Mine Land Information System
AOC	Approximate Original Contour
APS	Allegheny Power System
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
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 nearly 86 percent of the total production in 1999². 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 relatively stable, with increasing production over the last two evaluation years to production of 4.9 million tons for evaluation year 2001, a 17.9 percent increase over evaluation year 2000. Coal production in Maryland accounted for .44 percent of total U.S. coal production in 2001³, ranking eighteenth

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

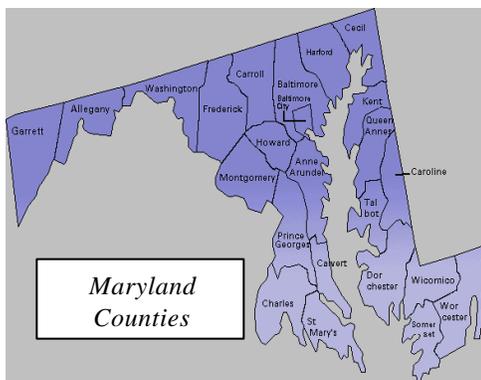
³Source - Energy Information Administration, U.S. Department of Energy

nationally in coal production of the 26 coal producing states, 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 that 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 mined locally. In addition to electric generation, the plant produces liquid carbon dioxide (CO₂) that is sold commercially. Statewide, Maryland consumes approximately 12 million tons of coal per year⁴ and ranks thirtieth nationally in total coal energy consumption. Consumption has increased by an average 1.3 percent per year for the period 1995-1999. Maryland employs approximately 449 coal miners (1999 statistics), a number which has been decreasing by an average of 1 percent per year from 1995-1999³.



Warrior Run Cogeneration Plant



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 Allegheny geologic formations contain five major minable fields or basins in the State. These include the Upper Youghiogheny, Lower Youghiogheny, Casselman, Upper Potomac, and Georges Creek. The Georges Creek Basin contains the most recoverable coal reserves in the State, followed by the Upper Potomac and the Casselman. There is no mining in the Upper Youghiogheny field. The demonstrated reserve base of coal in Maryland is approximately 717 million tons⁴, which ranks Maryland twenty-third nationally.

III. Overview of the Public Participation Opportunities in the

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

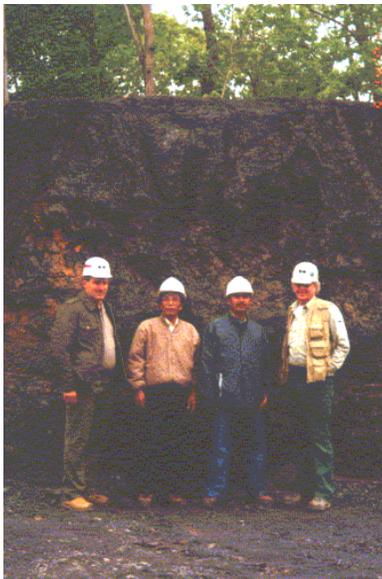
Oversight Process and the State Program

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, public meetings, organizational involvement, and formal regulatory participation.

Outreach

Outreach is the interaction, on a routine, periodic basis, of OSM with State and local coal associations, citizens, environmental organizations, and other groups to actively seek out and determine their areas of concern and suggestions, as well as to provide timely information about OSM activities that may interest such groups.

Maryland, as part of providing outreach opportunities, periodically conducts tours and gives presentations and training involving the mining and reclamation of coal. This year, a group of



Indonesian government employees involved with the mining industry in that country were given a tour of active mine sites and abandoned mine land projects as part of an OSM inspector training course. The Indonesian inspectors participated in permit reviews and site inspections with State and Federal counterparts as part of the exercise.

Maryland Department of the Environment, Bureau of Mines provided information of interest to the public by presenting technical papers on their efforts to prevent, control, and treat Acid Mine Discharge (AMD) at the National Abandoned Land Conference and the West Virginia Mine Drainage Conference.

Further public outreach is provided through World Wide Web sites maintained by MDE and OSM's Oversight and Inspection Office. These sites offer information on goals, objectives, and accomplishments under the program, as well as opportunities for public input via e-mail.

Indonesian Inspector Training

OIO also publishes a monthly newsletter to keep the public informed. The newsletter provides opportunities for public participation and comment on annual performance agreements, 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

MDE routinely provides opportunities for informal participation in both the Title IV and V programs. One such public hearing was held on October 5, 2000, for the purpose of receiving public input for the Kitzmiller Coal Waste Stabilization project. Public meetings were also held to receive public input regarding the Spruce Hollow Embankment Removal Project. Routine quarterly meetings held by the Land Reclamation Committee (LRC) are also open to the public. The LRC held nine public meetings during the evaluation period. Five of these meetings were held to vote on proposed reclamation plans; three meetings were held to review proposed reclamation plans; and one meeting was held to conduct field reviews on phase II bond release sites.

Organizational Involvement

Organizational involvement in restoring Maryland's mined lands is taking place at several levels in both the regulatory and abandoned mine lands programs. 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.

Regulatory Program

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. Nine Land Reclamation Committee meetings were held during the evaluation year.

Abandoned Mine Land Program

Through the joint efforts of local citizens, Maryland, the Canaan Valley Institute, OSM, and others, the Georges Creek Watershed Association was formed in 1999. Through their partnering efforts, the watershed group has been successful in receiving funds to help clean up the 19-mile long watershed from such groups as the Environmental Protection Agency (EPA), The Chesapeake Bay Foundation, Columbia Gas, The State of Maryland, and the coal industry. Funding from the Chesapeake Bay Foundation in 2001 for \$16,000 will allow the group to keep an intern employed through the year. It will also help pay for needed equipment.

The Youghiogheny River Watershed Association is also a small watershed association in Garrett County, which has become active during the evaluative year. The association is actively involved in doing AMD and other restoration activities in the Youghiogheny River area of Western Maryland. The association has partnered with the State of Maryland and Garrett Community College to work on a limestone fines dumping project on a tributary to the Youghiogheny River that has been impacted by AMD from an underground mine.

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, including the Potomac. 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 through 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.

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 (citizen complaints); 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

Impacts of public participation in Maryland are most evident in the area of mitigating AMD under MDE's Abandoned Mine Land Program. Organizational involvement, primarily through partnerships, has combined resources to address Maryland's most severe coal-related environmental problem.

One such partnership, which was created this year through public participation efforts, was the Ash Committee. This committee is made up of private, state, and industry representatives who are looking at various methods of using power plant combustion products for treating AMD and stabilizing abandoned underground mine voids. Another, the Neff Run Work Group, is a collection of private citizens along with, state, federal, and other representatives interested in the improvement of Neff Run, which has been severely impacted by AMD.

MDE, through its public participation efforts, also secured funding from The Sprenger- Lang Foundation to create a partnership to construct a limestone doser to treat AMD on Cherry Creek in Garrett County. Project partners included the Rock Lodge Trust, Trout Unlimited, and the Maryland Fisheries Program. The doser will help to mitigate the AMD in Cherry Creek and Deep Creek Lake. The measure of success for the project will be the re-establishment of a self-sustaining population of Brown Trout in Cherry Creek.

Public conservation groups partnering in MDE projects so far include:

- Canaan Valley Institute
- Chesapeake Bay Foundation
- Conservation Fund
- Environmental Protection Agency
- Fresh Water Institute
- Garrett County Watershed Association
- Georges Creek Watershed Association
- Maryland Coal Association
- The Nature Conservancy
- Shepherd College
- Small Streams and Estuaries Program
- Sprenger-Lang Foundation
- Trout Unlimited
- Western Maryland Resource Conservation Development Council
- Westmar High School
- Youghiogheny River Watershed Association
- Interstate Commission on the Potomac River Basin
- Wild Turkey Federation

These groups, along with assistance from MDE and OSM, have combined to undertake nineteen projects totaling more than two million dollars in total funding and in-kind contributions. More than thirteen miles of AMD-impacted streams have been restored under these projects.

IV. Accomplishments/Issues in the Maryland Program.

MDE 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, MDE has been actively involved in several program improvement initiatives and activities. These are discussed below, along with

outstanding issues and concerns that are being addressed in a mutual effort to maintain a high level of quality in the Maryland program.

Regulatory Program Accomplishments

MDE's Title V program has remained effective in the planning, mining, and reclamation of active sites. MDE continues to work toward refining and improving existing processes and procedures, as well as taking innovative measures in establishing new programs. During this evaluation period, MDE has made a concerted effort to improve bond release procedures by revising their Bond Release Checklist and Log form to better track program requirements to ensure prompt review of bond release applications. In addition, MDE has improved its permit review process by updating review procedures and checklists to provide for timely input by the National Park Service and U.S. Fish and Wildlife Service.

The most significant program improvement activity has been the concentrated effort by MDE and OSM to update MDE Statutes and regulations to be as effective as current SMCRA program standards. During the evaluation period, MDE completed the processing of four outstanding program amendments needed to address previously identified program deficiencies.

The first amendment (MD-581-00) dealt with various aspects of haul road design, certification, and static safety controls. MDE originally submitted this amendment in 1997 as a result of an OSM notification of changes to federal regulations. OSM's approval of MDE's updated program was published on November 22, 1999. MDE codified these required changes as final regulations on January 26, 2001.

MDE updated its program to provide for costs of reclamation of abandoned mine lands to be off set by the re-mining of unreclaimed areas. The AML Enhancement Rule (MD-582-00) that allows for AML projects to be funded with less than 50 percent federal dollars was submitted to OSM on 7/10/2000. OSM approved this amendment on August 12, 2001.

Program amendment (MD-578-00) deals with the filing of financial disclosure forms by members of the Land Reclamation Committee (LRC). OSM has approved this amendment and published it in the *Federal Register* on October 5, 2001.

Finally, a fourth amendment, addressing Various Regulatory Reform Issues (MD-577-01) was divided up to deal with issues associated with inspection frequency at forfeiture sites, bond release notarization, and prime farm lands. This portion of the amendment has been approved by OSM and is in the process of being promulgated by MDE. The second part of the amendment deals with impoundment design and is still being reviewed by OSM. The proposed changes involve the reference to Natural Resource Conservation Service (NRCS) technical release-60 that deals with

impoundment design criteria. This portion of the amendment is expected to be completed in early 2002.

In addition, MDE and OSM have been working on several other amendments that are progressing toward final approval. These include:

- A program amendment dealing with MDE's interpretation of their liability insurance regulations that is currently under review by OSM.
- An informal amendment dealing with EPACT regulations associated with mine subsidence from underground mining operations. The proposed regulations are currently being reviewed and the amendment is expected to be approved in 2002.
- A program amendment dealing with Valid Existing Rights (VER) that MDE is currently developing. They expect to submit it in early 2002 for approval.

Regulatory Program Issues

During this review period, MDE and OSM have identified a number of issues and problems preventing full implementation of the approved MDE program.

MDE, in addressing the concerns regarding timely reclamation of a bond forfeiture site raised by a citizen complaint, indicated that reclamation would be accomplished in several phases due to availability of funds. The MDE response was cause for OSM to become concerned about the sufficiency of funding in the MDE Alternative Bonding System. Preliminary results of an inquiry indicate that the bond pool was low but appears to be recovering. The recovery may be due to increased coal production that is generating additional fees. A formal study and report is planned for the next evaluation year.

In evaluation year 1999, the Pittsburgh Oversight and Inspection Office, in coordination with MDE, conducted an inventory of permit sites in Maryland that were considered potential long-term treatment sites. This definition included those sites that are reclaimed but continue to require treatment, as well as those active sites which have experienced unanticipated events which generate contaminated mine discharges (CMD). The purpose of the inventory was for estimating treatment costs on sites with potential long-term treatment needs. These costs will then be used to evaluate bonding to ensure adequate funding of treatment. In order to ensure the integrity of the inventory, procedures were developed to provide guidance on maintaining and updating the inventory. In the past evaluation year, OSM evaluated the program to ensure that all necessary authorities were present for adjusting bond and that MDE was properly implementing the program. Several meetings were held regarding the basis for bond

adjustments necessitated by CMD. During the next evaluation year, OSM will further coordinate with an MDE-designated contact person for coordination on joint responsibilities for maintenance of the CMD data inventory. We will prepare a report addressing any programmatic deficiencies and make recommendations for corrections.

AML Program Accomplishments

With the implementation of new OSM AML programs such as the CSI and Watershed Cooperative Agreement programs, Title IV abandoned mine land reclamation activities have taken on an increased role. MDE 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.

Funding for the Appalachian Clean Streams Initiative (ACSI) program in Maryland began in 1997 with the receipt of \$ 100,000. MDE has been an aggressive participant in this program to partner with local groups to identify and design abatement projects to improve stream quality. As of 2001, a total of \$279,952 has been received by MDE. This is in addition to Watershed Cooperative Funds that OSM has awarded to non-profit groups in the amount of \$828,000 also under the ACSI Program. ACSI funds have been used to partner with additional funding sources to complete the following projects: Glotfelty AMD, Elk- Lick II AMD, Elk-Lick III AMD, Everhart Seep AMD, and Teets AMD.

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

Maryland ACSI Project Status Table

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			
Cherry Creek, MD (FY97) completed	6/1/01	4	4	\$175,000	\$36,618	\$36,618	Environmental Protection Agency	\$45,000	\$81,618
							National Land Reclamation Center – Tech Support	In-kind	
Mill Run, MD (FY98)	6/1/01	3	0	\$119,166	\$25,000	\$43,166	EPA 104(B)(3) Grant	\$76,000	\$119,166
					\$18,166		Mill Run Watershed	In-kind	
Potomac Hill Run (FY99)	6/1/01	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	6/1/01	2	2	\$82,655	\$32,810	\$32,810	Maryland Small Creek and Estuaries	\$45,000	\$82,655
							U.S. DOE	\$5,000	
							Land owner	\$2,000	
							Garrett County	\$5,000	
Coney AMD (FY00)	6/1/01	1	0	\$76,000	\$21,500	\$21,500	Maryland Small Creeks/Estuaries	\$49,500	\$76,000
							Allegany County	\$5,000	
Elk Lick II (FY00) completed	6/1/01	2	2	\$40,858	\$20,858	\$20,858	Maryland Small Creeks/Estuaries & MDE	\$20,000	\$40,858
Neff Run (FY00)	6/1/01	2	0	\$131,000	\$100,000	\$100,000	MD State Highways	\$16,000	\$131,000
							Project Impact	\$5,000	
							Trout Unlimited	\$10,000	
TOTAL		20	12	\$639,679		\$279,952		\$408,500	\$681,297

The watershed Cooperative Agreement Program, a part of the Appalachian Clean Streams Initiative, was created in 1999 as a means of directly funding not-for-profit groups to work on AMD-related projects. Funds up to \$100,000 are provided to award to groups that have a not-for-profit status approved by the IRS.

If a group receives an award, they have a two-year performance period in which to complete a project. MDE has become an active participant in the Watershed Cooperative program. Since its inception, MDE has partnered with such groups as the Georges Creek Watershed Association, The Youghiogheny River Watershed Association, The Canaan Valley Institute, and the Western Maryland Resource Conservation and Development agency to address AMD problems.

A total of \$828,000 in Watershed Cooperative funds have been awarded to various non-profit groups in Western Maryland for AMD projects since the program was started. This is in addition to funding and in-kind services provided by other groups and agencies. A total of eight projects, three of which have been completed, have been awarded in Maryland.



The first project, The Mill Run Diversion Well, was completed in 2001. It is expected to be on-line to treat 19 percent of the acidity going into the main receiving stream of Georges Creek by November 12001.

The Everhart Seep Project was also completed in 2001. The project was done with The Nature Conservancy, MDE, Garrett Community College, and others. The project involved the installation of a passive treatment system to treat AMD before going into Cherry Creek that flows into Deep Creek Lake.

The Teets AMD project, also completed in 2001, involved the installation of the Pyrolocite microbial system to treat AMD along with wetlands. The project treats AMD that comes from abandoned underground mine workings.

Three additional projects are currently in the process of being constructed. These include the Lonaconing AMD project that involves the passive treatment of AMD before going into Georges Creek. The Kempton project involves the sealing of a mine shaft to prevent good quality water from coming into contact with abandoned deep mine workings. The Crellin AMD project involves the use of limestone treatment beds to add alkalinity to an AMD-impacted stream.

Through its partnership with the many groups interested in AMD remediation, MDE has been very successful in bringing more awareness to the major AML problem in the coal region.

Maryland Watershed Cooperative Agreement Status Table

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) Completed	9/30/99	2.5	0	\$182,000	\$80,000	\$80,000	MDE	\$57,500	\$182,800
							The Nature Conservancy	\$26,700	
							GCC	\$18,600	
Mill Run Remed- iation (FY99) Completed	10/25/01	3	0	\$290,000	\$135,000	\$135,000	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 (FY00) Completed	8/7/01	.5	0	\$190,000	\$80,000	\$80,000	6 partners including WMRC&D, Youghiogheny River Watershed Association, MDE, Garrett Soil	\$110,000	\$190,000
Kempton (FY00)	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 (FY00)	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 WMRC&D	\$63,300	\$121,300
								\$5000 in-kind	
Crellin	10/25/01	1	0	\$138,000	\$100,000	\$100,000	WMRC&D	\$15,000 in kind	\$138,000

Limestone Project (FY01)							MDE	\$13,000	
							Youghiogheny River Watershed Association	\$1,000 in-kind	
							Garrett County Health Department	\$1,000 in-kind	
							Garrett Community College	\$2,000 in-kind	
							MDE (Lab Services)	\$6,000 in-kind	
Lonaconing (FY01)	10/25/01	3	1.5	\$245,000	\$100,000	\$100,000	WMRC&D	In-kind	\$245,000
							MDE (Lab Services)	\$10,000 in-kind	
							MDE (CSI)	\$50,000	
							Allegany County	\$10,000 in-kind	
							Small Streams	\$75,000	
Casselman (FY02)	10/25/01	1.5	0	\$252,000	\$100,000	\$100,000	MDE	\$115,000	\$252,000
							WMRC&D	In-kind	
							DNR	\$6,000 in-kind	
							MDE-Labs	\$15,000 in-kind	
							Boy Scouts of America	\$4,000 in-kind	
							Trout Unlimited	\$4,000 in-kind	
							Lutheran Church	\$4,000 in-kind	
							NWTF	\$4,000 in-kind	
McDonald AMD Remediation Project (FY01)	10/25/01	2	0	\$155,000	\$100,000	\$100,000	Georges Creek Watershed Association	\$1,000	\$155,000
							WMRC&D	In-kind	
							MDE (CSI)	\$27,000	
							Trout Unlimited	\$1,000 in-kind	
							MDE (Lab Services)	\$6,000 in-kind	
							Allegany County	\$20,000	
TOTAL		15	1.5	\$1,779,300		\$828,000		\$1,021,600	\$1,779,600



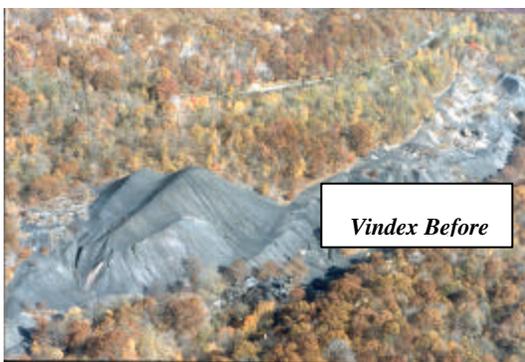
AML division did not undertake any Title IV projects. Several large AML projects that are to be bid out in the future include: The Shallmar Refuse Stabilization Project, Spruce Knob Project, Kitzmiller Coal Waste Stabilization Project, and the Spruce Knob Reclamation Project (Contracted to NRCS).

In addition to other projects, MDE staff continued work on updating the database. Data collected and entered into the national Abandoned Mine Land Database. Updated and new data was entered for 20

Three joint MDE/OSM subsidence-related investigations were done during the evaluative year. One of the investigations (Cogley subsidence) resulted in an AML emergency being declared. The emergency was abated under the Federal AML Emergency Reclamation Program.

National Abandoned Mine Land & Appalachian Region Awards

As part of publicly recognizing the nation’s most outstanding achievements in abandoned mine reclamation, MDE was awarded the Appalachian and National AML awards by OSM, based on voting done by other state and tribe AML representatives. The awards were presented at the National AML Conference held in Athens, Ohio. MDE received the award based on reclamation of the Vindex Reclamation Project located in Garrett County. The Vindex Project involved the reclamation of dangerous highwalls, refuse piles, open portals and shafts, and AMD. The AMD coming from the area contributed a net acid discharge of 3,354 pounds per day to the North Branch of



the Potomac, amounting to over 16 percent of the total acid loading of the river. The project was MDE’s single most complex, time-consuming, and costly AML reclamation project to date. It required over 55,000 man hours of work, cost more than twice MDE’s total annual AML grant allocation, and took three years to complete.

Also during the evaluation year, the AML Division



developed a partnership with the Department of Geography at Frostburg State University and created the Environmental Planning and Land Management Institute. The institute was created for the purpose of fostering educational and economic development in Western Maryland by supplying technologies that help improve the quality of life and environment. Some of the projects the institute will be working on will be the mitigation of AMD, mining reclamation, and the characterization of ash products.

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 that 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 operations.

OSM selected 25 sites for the study. Of the 25 sites, 20 inspections were conducted as oversight inspections of the regulatory program. The remaining five inspections were done as Phase III bond release sites.

Of the 25 sites, 24 sites (96percent) exhibited no off-site impacts. The remaining site had an off-site impact involving encroachment outside the permit boundary by sediment flowing off-site through a breached diversion ditch.

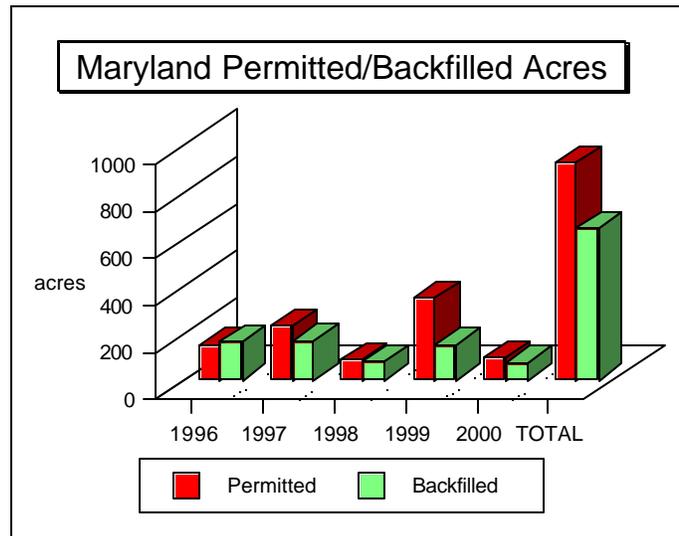
In addition to the OSM study, MDE identified two additional off-site impacts. One impact was associated with numerous sections of a perimeter control ditch being breached, thereby allowing sediment to leave the permitted area. MDE issued a Notice of Violation and the operator abated the violation.

The other off-site impact was associated with dust coming from a coal tiple facility. MDE issued a Notice of Violation for failure to follow the permittee's approved Dust Control Plan. The State air quality regulatory agency also took enforcement action.

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 operations⁵. Four reclamation parameters were evaluated: land form/approximate original contour (AOC), land capability, hydrologic reclamation, and contemporaneous reclamation. The study revealed that reclamation is generally effective and successful under the Maryland State Program. All eleven evaluations met all criteria for AOC, hydrologic reclamation, and contemporaneous



reclamation. All but one of the evaluation sites met the criteria for land capability. This site failed to achieve full land capability requirements on seven of the thirty- six acres reviewed for phase III bond release, due to not meeting requirements for erosion control or establishment of successful vegetation. Overall, during the evaluation year, Maryland's Land Reclamation Committee approved 185 acres of phase II and phase III reclamation and disapproved 66 acres. However, there are some areas that could be further improved. MDE must consistently use a revegetation success evaluation technique that meets the 90 percent statistical confidence interval. MDE must also ensure that requests for phase II and phase III bond release be accepted only during the time period of March 15 through September 15, per their policy. By doing so, vegetation will be evaluated only at times or seasons that allow the Bureau to properly evaluate the reclamation operations that are presented in the application as having been completed.

Customer Service

OSM directive REG-8 stipulates that OSM conduct a yearly oversight evaluation of an area of the State program that involves customer service. During the evaluation year, OSM reviewed⁶ MDE's customer service in the bonding process, with emphasis on citizen participation in bond release. The

⁵Maryland Bond Release Study, Evaluation Year 2001; Available upon request from the Pittsburgh OIO Office.

⁶Maryland Public Participation in Bond Release Study, October, 2001; Available upon request from the Pittsburgh OIO Office.

study revealed that MDE's procedures for establishing and releasing bond and involving the public in the bond release process are as effective as federal program requirements. The study shows that MDE follows their approved program for establishing bond in all instances reviewed. Regarding release of bond, the review found there were occasions when the files did not contain documentation that the required inspections had occurred between the filing date and approval date of backfilling/planting reports. Also, there were occurrences where the files did not contain evidence that proof of publication documentation was submitted within the time required and did not include all required information. OSM will consult with MDE during the next evaluation period to address these remaining issues.

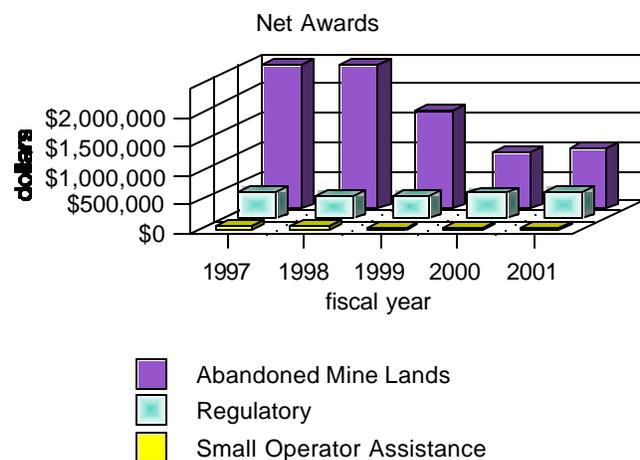
VI. OSM Assistance

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

Financial Assistance

As shown in table 9 (Appendix A), OSM awarded \$486,693 in Title V regulatory assistance funding during fiscal year 2001, which was approximately \$10,000 more than awarded the previous year. This is in addition to the \$1,031,939 awarded for the Title IV abandoned mine lands reclamation program and \$35,000 for the Small Operator Assistance Program (SOAP). From program inception to the end of fiscal year 2001, OSM has granted MDE approximately \$33.6 million net awards. Of this amount, \$.5 million was for the Small Operator Assistance Program, \$7.4 million for regulatory operations, and \$25.7 million for abandoned mine land reclamation projects. Figure 2 shows comparative grant awards for the three program areas over the last five fiscal years.

Historical Funding Levels



Technical Assistance

OSM performed one technical investigation during the evaluation period. The investigation was the result of an assistance request from MDE related to mine subsidence. OSM provided the assistance of two staff members, a reclamation specialist and Mining Engineer. Mining information revealed that the coal operator's last longwall panel was located approximately 1500 feet north of the residence under which the settling had occurred. Therefore, it was concluded that there was no relationship between mining and the settling at the residence.

OSM also provided assistance to MDE in deciding the eligibility of a proposal to undertake an AML project under AML enhancement rules. The first question was whether Title IV requirements apply to an enhancement rule project in which no title IV funds were being spent due to the value of

the incidental coal to be extracted as a necessary part of reclamation. The determination was, since coal removal would be greater than 250 tons, the project must either be treated as a Title V surface coal mining operation in accordance with MDE's approved program, or as a Title IV AML project in accordance with the approved State Reclamation Plan and AML enhancement regulations. The second question was whether the Federal fee collection requirements under 30CFR Part 870 applied to an AML enhancement project such as the contemplated Frostburg State Project. The decision was that 30CFR 870.11(c) exempts such projects from the reclamation fee requirements.

OSM has also assisted MDE by providing periodic financial status tables, examples of processes and procedures used by other States, and allowability of proposed funding actions.

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.

Performance Monitoring Study

OSM conducted a study during the evaluation period⁷ to assess the impact of planning, mining, and reclamation activities on the effectiveness of the Maryland Program in meeting the goals of the SMCRA. OSM evaluated twenty permitting, mining, and reclamation standards on twenty-one permit sites for compliance with MDE program requirements. All sites were in compliance with all standards, with the following exceptions:

Breached Diversions – Two sites, permit DM-84-101 and SM-91-419, had a breached diversion ditch. Both sites were cited by MDE. There was no off-site environmental impact for permit DM-84-101. On permit SM-91-419, there was minor off-site sedimentation.

Water Monitoring – The operator failed to monitor sampling points on two permits. Permit #SM-84-264 failed to monitor during the previous four quarters and failed to record flows for four monitoring points. Permit #DM-90-109 failed to monitor at five monitoring points. MDE cited the violations at both sites. There was no off-site environmental impact. The study demonstrated that the Maryland program is effectively meeting the reclamation objectives of SMCRA. The Oversight and Inspection Office looks forward to continuing a partnership with MDE 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.

Impoundments

OSM conducted a study⁸ during the evaluation period to assess and mitigate the potential for impounded water, slurry, water treatment sludge, coal combustion byproducts, or other materials to drain in an uncontrolled manner into subjacent or adjacent underground mines. Based on the results of the study, OSM concluded that there is little or no potential for uncontrolled drainage from

⁷Maryland Performance Monitoring Study, Evaluation Year 2001. Copies available from the Pittsburgh OIO Office upon request.

⁸ Maryland Impoundments Review; EY2001.

Mining Safety and Health Administration (MSHA) class impoundments into subjacent or adjacent underground mines.

There are presently no MSHA-class impoundments listed by MSHA for coal mines in the State of Maryland. Consequently, no potential exists for uncontrolled drainage from these impoundments into coal mines. MDE confirmed the list by stating that there were no proposed or existing impoundments in MDE's Mining Program that would meet either the MSHA-size classification criteria⁹, or NRCS hazard class AB@ or AC@ criteria found in technical release TR60¹⁰. MDE staff further indicated that there was no known history of pond failure as a result of subsidence or break through.

Results of the study were that MDE law and regulations are generally as effective as corresponding OSM law and regulations. The exception is that MDE had not revised State regulations to be as effective as those October 20, 1994, revisions to 30CFR. These regulations relate to referencing design standards for MSHA-class impoundments and National Resources Conservation Service (NRCS) class B and C impoundments. MDE has submitted an informal amendment to address these revisions that OSM is currently evaluating. Overall, MDE implements its program requirements for design, construction, and approval of impoundments in an effective and rational manner, consistent with its approved program.

Remining

During the evaluation year OSM conducted a study¹¹ to review the success of regulatory remining incentives under the approved Maryland program through identification of the impacts of remining on site conditions at or adjacent to the previously mined area and assessment of the effectiveness of the incentives in encouraging remining. Many of Maryland's existing and potential coal mine sites have been affected by previous mining. MDE has made efforts to encourage the remining of these sites through efforts that mirror federal incentives, and, in the case of open-acre bond reductions,

⁹Storage volume equal to or greater than 20 acre feet and water impounded greater than five feet above upstream toe of structure, or impound water to more than 20 feet higher than upstream toe of structure.

¹⁰AB@classification = Dams located in predominantly rural or agricultural areas where failure may damage isolated homes, main highways or minor railroads or cause interruption of use or service of relatively important public utilities.

AC@classification = Dams located where failure may cause loss of life, serious damage to homes, industrial and commercial buildings, important public utilities, main highways, or railroads.

¹¹ Maryland Remining Study; October 2001.

provide additional incentives. In this study, which included the eight permits which have been issued or significantly modified since October 1, 1999, seven of the permits had been previously mined, and four of these seven took advantage of at least one of the incentives offered by MDE. Almost two miles of highwall is planned for elimination for these permits, with over 100 acres of spoil planned to be reclaimed, and six deep mine entries and 520 acres of underground workings eliminated.

Results of the study were that Maryland is successfully implementing its reining program. By adopting some administrative and procedural changes addressed in the findings and recommendations section, the Maryland program will be fully as effective as the federal requirements and continue to more efficiently utilize coal reserves and effectively conserve funding for abandoned mine land efforts.

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 MDE staffing. Unless otherwise specified, the reporting period for the data contained in all tables is October 1, 1999, to September 30, 2001. Additional data used by OSM in its evaluation of MDE's performance is available for review in the evaluation files maintained by the Pittsburgh OIO Office.

APPENDIX B

Maryland Comments

MDE had the following comments to the EY2001 Evaluation Report.



MDE

MARYLAND DEPARTMENT OF THE ENVIRONMENT

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Parris N. Glendening
Governor

Jane T. Nishida
Secretary

November 21, 2001

Mr. George J. Rieger, Manager
Oversight and Inspection Office
Office of Surface Mining
Appalachian Regional Coordinating Center
Three Parkway Center
Pittsburgh, PA 15220

Dear Mr. Rieger:

The Maryland Bureau of Mines has reviewed the draft 2001 Annual Evaluation Summary Report. I concur with the findings of the report in general but did note a couple of items you may want to check closer. On page 3, I believe the review period should be October 1, 2000 through September 30, 2001. On page 24 the Title V funding amount is shown as \$4,486,693. I believe this to be in error and should be corrected.

Thank you for the opportunity to review the annual report prior to its' final publication. I will look forward to obtaining a final copy.

Sincerely,

C. Edmon Larrimore, Program Manager
Mining Program

CEL/mlt

cc: John Carey

Disposition of Comments

Corrections were made to the annual report to reflect the comments made by Maryland per letter dated November 21, 2001. The review period on page three was corrected to read October 1, 2000 through September 30, 2001, and the Title V funding amount on page 24 was corrected to read \$486,693. In addition, the Maryland ACSI Project Status Table on page 14 and the Maryland Watershed Cooperative Agreement Status Table on page 17 were corrected.