



**OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT**

**Annual Evaluation Summary Report**

**for the**

**Regulatory and AML Programs**

**Administered by the State**

**of**

**MARYLAND**

**for**

**Evaluation Year 2002**

**(October 1, 2001, through September 30, 2002)**

**December 2002**

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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, 2001, through September 30, 2002. 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 has been thorough and has proceeded in a contemporaneous fashion. A study of the three most recently issued permits indicates that, on average, seventy-eight percent of the affected area has been backfilled and planted at any time<sup>1</sup>. On a larger scale, for the

period 1997 through 2000, the ratio of affected acres to backfilled acres is 92:100. Ninety-two percent of sites reviewed exhibit no off-site impacts.

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<sup>1</sup> 64 % in 1998 study, 68 % in 1999 study, 87 % in 2000 study, 75% in 2001 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 concerns relating to bonding system adequacy, documentation of violations, and road certification. These concerns are addressed in more detail under the "Regulatory Program Issues" subsection. OSM will work with MDE to

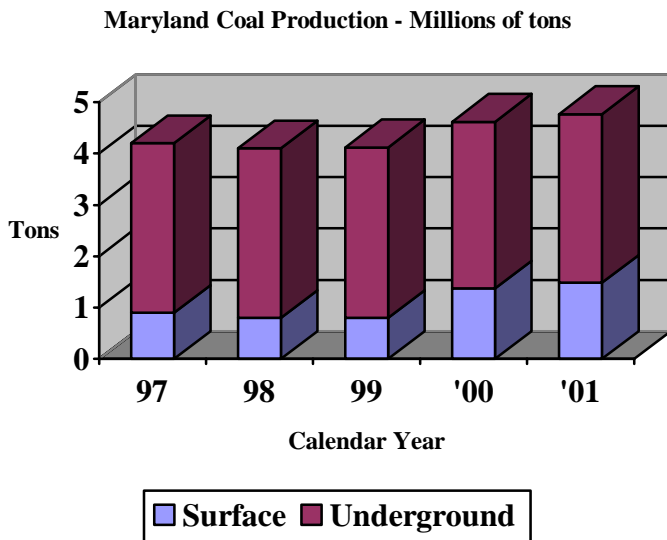
resolve these issues and others addressed in the evaluation year 2003 Performance Agreement between MDE and OSM. This will help ensure the continuation of a strong and viable program in the State of Maryland.

The following sections of this report provide additional detail on program successes and issues identified in the 2002 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 70 percent of the total production in 2000<sup>2</sup>. 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, as shown graphically on the chart at the left, the tonnage mined has been gradually increasing over the last five evaluation years to production of 4.8 million gross tons for evaluation year 2001, a three percent increase over evaluation year 2000. The

increase is attributable primarily to surface coal mine production. Since 1999, there has been an eighty-six percent increase in surface coal production while underground production has remained constant. The continued increased production in surface mined coal in Maryland is primarily attributed to the continued operation of the AES Electric Cogeneration plant located near Cumberland in Allegany County.

Total coal production by all mining methods in 2001 was 4,771,802 tons that represented a 3.1 % increase in production from 2000. Coal production in Maryland accounted for .47 percent of total U.S. coal production in 2002<sup>3</sup>, ranking eighteenth 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.

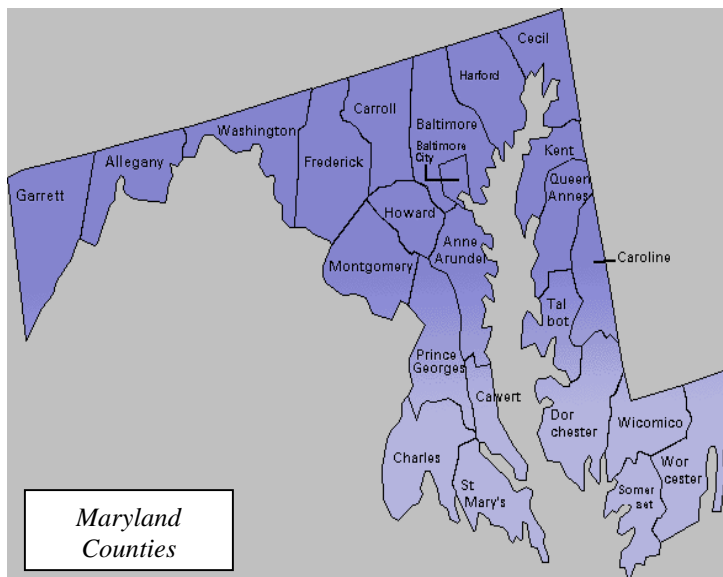
<sup>2</sup>The majority of underground coal production in Maryland is generated from one mine employing approximately 250 people.

<sup>3</sup>Source - Energy Information Administration, U.S. Department of Energy, Table 67. Coal Consumption by Census Division and State, year 2000.

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 (CO<sub>2</sub>) that is sold commercially. Statewide, Maryland consumes approximately 8.6 million tons of coal per year<sup>4</sup> and ranks twenty-seventh nationally in total coal energy consumption<sup>5</sup>. Consumption has decreased by an average 6.6 percent per year for the period 1996-2000. Maryland employs approximately 455 coal miners (year 2000 statistic), a number which has been decreasing by an average of 1 percent per year from 1996-2000<sup>6</sup>.



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 Allegany 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 695 million tons<sup>7</sup>, which ranks Maryland twenty-third

<sup>4</sup> Source – Energy Information Administration, Table 67, Coal consumption by census division and State, 2000.

<sup>5</sup> Source – Energy Information Administration, Table 10, Consumption by Source and Total consumption per Capita, Ranked by State, 1999.

<sup>6</sup> Source – Energy Information Administration, Table 41, Average Number of Employees/Miners at Underground Mines by State, 1991, 1996-2000.

<sup>7</sup> Source - Energy Information Administration, U.S. Department of Energy, Table 33, U.S. Demonstrated Reserve base of coal by Potential Mining Method and Ranked by State, January 1, 2000.

nationally.

### 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, 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, businesses, citizens and environmental organizations to actively seek out and determine their areas of concern and suggestions.

During the evaluation period, OSM/OIO continued to reach out to the public and industry through various efforts done mostly in conjunction with state activities.

The Maryland Department of the Environment along with the Office of Surface Mining jointly held an Earth day program on April 28, 2002, in Frostburg, Maryland. An outdoor display along

with selected handouts and a computer presentation on Acid Mine Drainage (AMD) provided information to the public regarding both regulatory and abandoned mine land programs.





On August 9, 2002, U.S. Senator Paul Sarbanes gave a presentation to the public announcing the award of \$250,000 to the Maryland Bureau of Mines to design and construct a passive wetland treatment system along a one-half mile stretch of the North Branch of the Casselman River near Grantsville, Maryland.

The Casselman River is a high quality mountain stream noted for its populations of trout, stonecats, and hellbenders in its less impaired reaches. The North Branch of the

Casselman is classified for water contact recreation and aquatic life and is moderately impaired by the discharge of pre-law coal mines along its length. The Maryland department of Natural Resources has identified this AMD impaired stretch of the North Branch of the Casselman as suitable for recolonization by the State Endangered Hellbender, a large aquatic salamander, if prime water quality is restored.

In addition to the funding announced by Senator Sarbanes, George Rieger of OSM/OIO gave a presentation on OSM activities in the Casselman, including an additional \$100,000 that has been awarded by OSM to the Western Maryland Resource Conservation and Development Agency as part of a Watershed Cooperative project to work on an AMD remediation project on the Casselman.



A representative from EPA, Region 3 also announced the award of \$999,450 for use in correcting AMD problems associated with past underground mining associated with the Kempton deep mine which discharges into the North Branch of the Potomac River and is Maryland's largest polluttional discharge.

OIO and Maryland representatives participated in a new OSM employee orientation training course conducted the week of May 12 in Washington D.C. and Maryland. The course is designed to provide new employees with an overview of OSM's mission, offices, and personnel policies.



The Pittsburgh Office, representing the Appalachian Region Coordinating Center, and the Maryland Bureau of Mines, provided information on Title V oversight and policy to approximately twenty five OSM employees, most who have worked for OSM from three to eighteen months.

Following these presentations, new employees traveled to Maryland, where representatives of the Maryland State Bureau of Mines, the coal industry, and a watershed group hosted them on a mine tour.

Public outreach was also provided through MDE and OSM web sites. The sites offer information on the mission of both agencies and important links to various program elements, federal and state regulations regarding mining and sources for general information.

In addition, OIO also publishes a bi-monthly newsletter that is distributed to industry, environmental and citizen groups. The newsletter provides opportunities for public participation and comment on annual performance agreements, Federal Register notices, and items of interest to the public. Department of Interior press releases related to surface and deep mining activities are also included.

## **Public Meetings and Hearings**

MDE routinely provides opportunities for public participation in both the Title IV and Title V programs. These meetings also involve OSM representation. All hearings and public meetings provide a forum for the public, industry, the university community, and local politicians to voice their opinions on various issues.

Routine quarterly meetings held by the Land Reclamation Committee (LRC) are also open to the public. There were eight LRC meetings held during the period. These meetings were open to the public and are held to discuss and vote on such issues proposed mining permits, Phase II bond releases, reclamation plans and various other mining related matters. Six of the meetings were to review reclamation plans for new permits and two were for evaluating revegetation eligible for phase II bond release.

## **Organizational Involvement**

Organizational involvement in restoring Maryland's mined lands continues to grow in both the regulatory and abandoned mine lands program. Maryland continues to broaden its involvement with such groups as watershed associations, National Park Service, Natural Resource Conservation

Service, Trout Unlimited, and others. Through increased partnering opportunities with various groups and agencies, Maryland is able to leverage additional funds and take on additional land reclamation projects.

### **Regulatory Program**

The LRC was formed in 1967 through legislation enacted by the State of Maryland. 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 the review of mining and reclamation plans, progress reports, and final reports. It establishes plans and procedures, as well as practical guidelines, for prompt and satisfactory reclamation, conservation, and revegetation of all lands disturbed by coal mining within the State. The Committee meets periodically and OSM representatives attend the meetings along with members of the public, industry consultants, and coal operators. Eight LRC office meetings were held during the evaluation year.

### **Abandoned Mine Land Program**

Continuing efforts by local citizens, Maryland officials, local organizations, OSM and others has helped with the creation of two watershed groups in the coal region of Western Maryland.

The Georges Creek Watershed Association and the Youghiogheny Watershed Association have been very successful in partnering with others to resolve environmental problems, primarily related to AMD projects.

During 2002, the Georges Creek Watershed Association was able to partner with the Western Maryland Resource Conservation and Development agency and others in obtaining funding to do five projects in the severely impacted Georges Creek valley.

One project that was completed during the period, the Mill Run AMD Project, will help eliminate 19% of the AMD going into Georges Creek and allow for the increased survival of aquatic species in Mill Run.

All five of the projects were either completed or construction started during the period. Over \$500,000 in Watershed Cooperative funds alone have been invested in the five projects. Another 5-6 projects are currently being reviewed by the watershed association for possible funding in 2003-2004.

The Youghiogheny Watershed Association is active with projects of a mining and non-mining related nature on the Youghiogheny River, The North Branch of the Potomac, Deep Creek Lake, and the Casselman River. Three Watershed Cooperative grants have been awarded to the association in conjunction with the Western Maryland Resource Conservation and Development agency. The projects involve the design and implementation of a project

to treat a borehole discharge, passive treatment of an AMD seep that prevents the survival of the endangered Hellbender salamander, and the sealing of a man-shaft to prevent the contamination of good quality water by AMD. The three projects include funding in the amount of \$280,000 from OSM alone.

The Hellbender project on the Casselman River recently was awarded an additional \$250,000 from EPA to construct a passive AMD treatment system. The Association has partnered with Garrett Community College faculty and students, the State of Maryland MDE, Trout Unlimited and others to do these projects.

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 across the United States. The designation included the Potomac River. The designation has meant that OSM and other local, state, federal and private partners are placing additional emphasis on improving the water quality of the Potomac. AMD has severely impacted the Potomac in the coal region of Maryland. MDE continues to be part of this effort through the use of lime dosers to treat AMD going into the Potomac from various tributaries, implementing a comprehensive investigation of the Kempton discharge, the largest single polluttional discharge on the North Branch of the Potomac and exploring the possible solutions to controlling the Kempton discharge.

### ***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 declared unsuitable for mining; requesting inspections of active coal mine operations where there is reason to believe a violation is occurring (citizen complaints); requesting pre-blast surveys if living within one half mile of the permit area; and appealing Departmental decisions through the appeal process.

During the review period, one appeal was heard by a Maryland Administrative Law Judge as a result of an appeal filed by a landowner concerning topsoil replacement.

During the review period two citizen complaint Ten Day Notices (TDN's) were issued by OSM to the State of Maryland, MDE. Both responses were deemed appropriate.

### ***Impacts/Results of Public Participation***

Impacts of public participation are evident in both the Title IV and Title V programs. Through partnerships with others, Maryland has been able to combine resources and accomplish more in the way of environmental restoration.

The Neff Run work group is a program involving multiple groups from varied disciplines is This group of private citizens, educators, industry representatives, and others has developed the Neff Run Watershed Restoration Plan. The plan is a multi-objective community based

strategy for protecting and enhancing water quality, stream stability, habitat, and recreational opportunities in the Neff Run and Georges Creek watersheds. Both AMD and stream stabilization projects have occurred as a result of the cooperation and partnering of the Neff Run group. The Phase I portion of the project has resulted in over \$244,000 being leveraged to construct rock vane weirs, removal of fish blockages, vegetative plantings, and fencing. Phase II of the project will include limestone dumping for AMD treatment, construction of a limestone bed leach bed, installation of additional weirs and the planting of native plant species along stream banks.

The effects of public participation are also noted in the regulatory program. This was evident during the evaluative year when several public informational meetings were held by MDE to obtain public input regarding a proposal to surface mine on State land for the purpose of removing the remaining coal from an abandoned 60 acre deep mine. Maryland law prohibits surface mining on state owned land except where abandoned surface or underground mines will be reclaimed as part of the mining operation. In this case, the mining would have eliminated subsidence problems and allowed the land to be used for development purposes. Testimony from the public regarding the proposed project was taken by MDE and an environmental assessment of the proposed project was completed for review by State authorities. The decision to allow mining at the site was ultimately reversed.

#### **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. A study of the three most recently issued permits indicates that, at any time, on average, seventy-eight percent of the affected area has been backfilled and planted<sup>8</sup>. Eighty-nine percent of sites reviewed exhibit no off-site impacts during this evaluation year. 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 streamlined program reporting requirements by modifying the Bureau's semi-annual report to allow it to substitute for the semi-annual program narrative required of all AML and A&E program grants. Maryland also closed all outstanding expired grants and is

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<sup>8</sup> 64 % in 1998 study, 68 % in 1999 study, 87 % in 2000 study, 75% in 2001 study.

currently up-to-date on all grant closings.

Maryland established a formula for the distribution of Small Operator Assistance Program (SOAP) funds, and modified the standard SOAP contract to include a clause requiring SOAP labs to meet State Health and Safety requirements.

Maryland developed checklists to aid in assuring that all written findings are included in permit application approvals, and that all facets of bond release requirements are being addressed.

Maryland inspectors were trained and Maryland has adopted a statistically valid method for measuring the success of revegetation on lands subject to bond release.

In regard to Program Amendments, the Liability Insurance program amendment was resolved during this evaluation year without the need for a formal amendment. OSM accepted Maryland's revised interpretation of the period under which liability insurance is required.

### **Regulatory Program Issues**

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

A review of Maryland inspection data during the evaluation year<sup>9</sup> revealed that, during complete inspections, Maryland documented more violations when accompanied by OSM than when not accompanied by OSM. This raises a concern regarding the full documentation of mine site conditions at time of inspection.

Another study conducted during the evaluation year<sup>10</sup> identified a concern regarding the adequacy of Maryland's Alternative Bonding System (ABS). The ABS had an estimated \$524,759 deficit for the four existing forfeitures in the State. If no more forfeitures occur within the next four years, Maryland should be able to replenish the fund in approximately thirty months. If forfeitures continue to occur at the historical rate of thirty-six acres per year, the time to replenish the fund would be estimated at more than six years.

Also, a concern was identified regarding whether roads are meeting all permit application requirements and are being certified in a timely manner<sup>11</sup>. The road certification concern was raised because of the fact that the average time between the start of mining to certification of roads is 139 days.

These issues are being addressed through ongoing communication and coordination between OSM and Maryland.

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<sup>9</sup> Performance Monitoring Study, page 29

<sup>10</sup> Alternative Bonding System Analysis, page 29

<sup>11</sup> Roads Study, page 32

## **AML Program Accomplishments**

Maryland has undertaken several large standard AML projects during this evaluation year and has also made good use of the Clean Streams Initiative program that is 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:

Standard AML Projects – Maryland’s standard Title IV AML program continued to make progress in correcting abandoned AMD problems and reclaiming mine lands.

During the review period, construction activity increased from the last several performance periods with the start of a major reclamation project. The Shallmar Refuse Removal and AMD project began during the period and involves the excavation of a large coal refuse site at a cost of almost \$1.2 million. Also involved in the project is the removal of several hazardous mine buildings and related equipment. A lime doser will also be installed to treat AMD flowing from several abandoned mine entries located above the refuse pile. The AMD will be treated before entering the Potomac River near the small community of Shallmar.



Other Title IV projects completed or under construction during this evaluative year were the Warnick Road Water Line Installation Project, which provided potable water to six residences that were impacted by AMD. Allegany County Maryland was a partner with MDE in the project and shared in the design and overall construction cost of the project.



The Spruce Hollow Waste Dam Removal Project began construction in August 2002 and is being



done in partnership with NRCS and involves the removal of a dam partially constructed of coal wastes at a cost of \$211,000. The project is expected to be completed by November 2002.

Another project that got underway during the period was the Oak Hill Refuse reclamation Project. The project involves the removal of coal refuse material from the banks of a stream to prevent downstream sedimentation and flooding. The project also involves the installation of a

passive AMD treatment system to treat AMD from an abandoned deep mine located at the site. The project is being done in partnership with NRCS and has a cost of \$150,000.

Maryland, because of its minimum program status receives \$1.6 million in Title IV funds annually from OSM. In addition, Maryland receives \$163,769.00 in Clean Streams Initiative funds annually. Maryland also receives ten percent set-aside funds annually and utilizes \$65,000 of these funds to help operate seven lime dosers which treat AMD impacted streams in the Western Maryland Region.



Because of the limited funds received to do Title IV projects, Maryland actively solicits partnerships with other State and Federal agencies as well as private groups such as watershed associations, industry and environmental groups.

Clean Streams Projects - 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 2002, a total of \$235,165 has been



received by Maryland. This is in addition to Watershed Cooperative Funds that OSM has awarded to non-profit groups in the amount of \$928,000, also under the ACSI Program.

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 *		Total Estimated Cost	OSM Funding		Planned Partners' Contributions*		OSM/Partner's Cumm. Total to date
		To be Restored	Completed		By FY	Cumm. to date			
Cherry Creek, MD (FY97) Completed	October-02	4	4	\$175,000	\$36,618	\$36,618	Environmental Protection Agency	\$45,000	\$81,618
	Completed						National Land Reclamation Center – Tech Support	In-kind	
Mill Run, MD (FY98)	October-02	3	3	\$119,166	\$25,000	\$43,166	EPA 104(B)(3) Grant	\$76,000	\$119,166
	completed				\$18,166		Mill Run Watershed	In-kind	
Elk Lick III FY00 Completed	10/2/2002 Completed	2	2	\$82,655	\$32,810	\$40,250	Maryland Small Creeks and Estuaries	\$45,000	\$82,655
					\$7,440		U.S. DOE	\$5,000	
							Land owner	\$2,000	
							Garrett County	\$5,000	
Coney AMD (FY00)	10/2/2002 Completed	1	1	\$76,000	\$21,500	\$37,273	Maryland Small Creeks/Estuaries	\$49,500	\$76,000
					\$15,773		Allegany County	\$5,000	
Elk Lick II (FY00) Completed	10/2/2002 Completed	2	2	\$40,858	\$20,858	\$20,858	Maryland Small Creeks/Estuaries & MDE	\$20,000	\$40,858
Neff Run (FY00)	October-02	2	0	\$188,000	\$57,000	\$57,000	MD State Highways	\$16,000	\$131,000
							Project Impact	\$5,000	
							Trout Unlimited	\$10,000	
							Appalachian Lab	\$100,000	
<b>TOTAL</b>		<b>14</b>	<b>12</b>	<b>\$681,679</b>		<b>\$235,165</b>		<b>\$383,500</b>	<b>\$531,297</b>

### **Watershed Cooperative Agreement Projects**

The Watershed Cooperative Program was started in 1999 as part of the Appalachian Clean Streams Initiative. The creation of the Cooperative Program was done as a mechanism for providing needed funding for non-profit groups to use in solving local AMD problems. Non-profit groups ranging from small community based watershed associations to large national environmental groups have provided and secured funding from OSM to do Watershed Cooperative Projects in Maryland. These groups include the following:

Canaan Valley Institute  
Georges Creek Watershed Association  
The Nature Conservancy  
Youghiogheny Watershed Association  
The Conservation Fund  
The Freshwater Institute  
The Western Maryland Resource Conservation and Development Agency

Other project partners have included EPA, NRCS, Maryland DNR, Buffalo Coal Company, Tri-Star Mining, and Garrett Community College and Allegany County.

Since inception, there have been ten Watershed Cooperative Projects in the two county area of Western Maryland. Seven of these projects are either completed or are currently being constructed. Three projects are still in the design phase. Over 1 million dollars has been obligated from Watershed Cooperative Funds since 1999 to help the various non-profit groups do AMD projects. These projects involve the installation of passive treatment systems as well as active treatment systems such as lime dosers.

Receipt of Watershed Cooperative Funds has allowed Maryland to partner with various groups and stretch limited ACSI funds to assist in completing various AMD projects. In addition, because of the start-up construction funding provided by the Watershed Cooperative Program, agencies such as EPA and the Maryland Department of Natural Resources Power Plant Research Program have been able to provide additional funding. An example of which is the recent funding by EPA in the amount of \$250,000 for a project similar to the North Branch Casselman River Watershed Project.

During the evaluative year, the first watershed Cooperative Project was formally dedicated. The Mill Run Pulsed Limestone Bed technology project utilized \$135,000 in Watershed Cooperative funds as part of a combined \$300,000 project to treat AMD in the Mill Run Watershed. The project involves the treatment of AMD with fine limestone in the hope of restoring Mill Run and the aquatic habitat below the treatment site where wild Brook Trout once flourished. Members of the Georges Creek Watershed Association maintain the Mill Run project. The Lonaconing and Fazenbaker AMD Watershed Coop projects were also completed during the evaluation period and involve passive



treatment of deep mine discharges into Georges Creek. Watershed groups in both coal-producing counties of Maryland continue to support efforts to remediate AMD in their watersheds.

### 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	October-02	2.5	0	\$182,000	\$80,000	\$80,000	MDE	\$57,500	\$182,800
							The Nature Conservancy	\$26,700	
							GCC	\$18,600	
Mill Run Remediation (FY99) Completed	October-02	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	
Potomac Hill Run (FY99)	October-02	2	0	\$200,000		\$100,000	Small Streams/Estuaries	\$75,000	\$200,000
							Title IV ACSI funds	\$25,000	
Teets (FY00) Completed	October-02	0.5	0	\$190,000		\$80,000	6 partners including WMRC&D, Youghiogheny River Watershed Association, MDE, Garrett Soil	\$110,000	\$190,000

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			
Kempton (FY00)		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)	October-02	0.5	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	
							WMRC&D	\$15,000 in kind	
							MDE	\$13,000	
							Youghiogheny River Watershed Association	\$1,000 in-kind	
Crellin Limestone Project (FY01)	October-02	1	0	\$138,000		\$100,000	Garrett County Health Department	\$1,000 in-kind	\$138,000
							Garrett Community College	\$2,000 in-kind	
							MDE (Lab Services)	\$6,000 in-kind	
							WMRC&D	In-kind	
							MDE (Lab Services)	\$10,000 in-kind	
							MDE (CSI)	\$50,000	\$245,000
							Allegany County	\$10,000 in-kind	
							Small Streams	\$75,000	
							MDE	\$115,000	\$252,000
							WMRC&D	In-kind	
							DNR	\$6,000 in-kind	
							MDE-Labs	\$15,000 in-kind	
Casselman (FY02)	October-02	1.5	0	\$252,000	\$100,000	\$100,000			

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			
							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)	October-02	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	
<b>TOTAL</b>		<b>17</b>	<b>1.5</b>	<b>\$1,979,300</b>		<b>\$928,000</b>			<b>\$1,979,600</b>

### National Abandoned Mine Land & Appalachian Region Awards



On September 17, 2002, the State of Maryland was recognized by the Secretary of the Interior as a winner of the Appalachian Region Abandoned Mine Land award. The award was given for reclamation of the Kempton Coal Waste Stabilization and Doser Installation Project in Kempton, Maryland.

The Abandoned Mine Land Reclamation Awards Program was started in 1992, to publicly recognize outstanding abandoned mine land reclamation and publicize exemplary reclamation techniques. The winners are selected by judges from each field office and State and Tribal offices.



Reclamation at the site involved the removal of 160,000 cubic yards of refuse from a wetland area that was classified as a Wetland of Special

State Concern. In addition, a water powered lime doser was installed to help treat AMD from an 18-inch diameter borehole with a discharge of 3.5 million gallons of AMD per day.

## **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 collects the findings from inspections and other evaluations for a perspective 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***

**Joint Inspections** - During the evaluation period, OSM conducted a joint study to assess the number and severity of off-site impacts occurring as a result of surface and underground mining operations. OSM selected twenty-six sites for the study. Of the twenty-six sites, seventeen were randomly selected and reviewed for all aspects of planning, mining, and reclamation. Two sites were inspected as a result of formal complaints to OSM. Six sites reviewed for final reclamation prior to bond release. The remaining five sites were on the Acid Mine Drainage (AMD) Inventory due to unanticipated acid discharges and are reviewed semi-annually.

Of the twenty-six sites jointly inspected, twenty-two (84.6%) exhibited no off-site impacts. Of the four sites with off-site impacts, two had enforcement actions deferred to Maryland for issuance of Notices of violation and/or Cessation Order. One, a forfeiture site, had been previously cited by Maryland, and one had no action taken by OSM or Maryland since the violation was abated during the inspection.

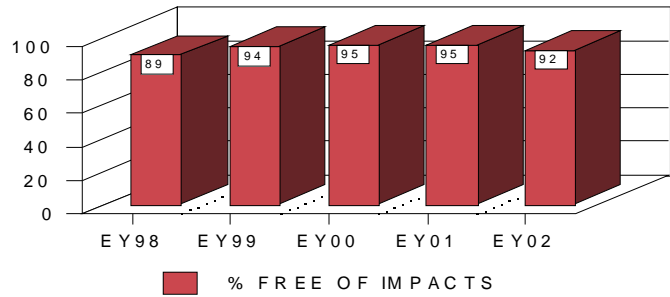
**State-only Inspections** - In addition to the joint OSM/Maryland study, sixty-four sites were inspected by Maryland without OSM accompaniment. Sixty-two (96.9%) exhibited no off-site impacts. Of the two sites with impacts, one impact was associated with permit SM-00-435 where a resident near the permit lost his well water supply. The operator was ordered to provide a temporary water supply until a permanent supply could be installed. This was categorized by Maryland as a moderate hydrology impact to people. The other off-site impact was associated with permit SM-99-434 where fly rock left the permit along with spoil material from blasting operations. The operator was ordered to remove the rock and debris. This was categorized as a moderate blasting effect to land. In both cases, NOVO's were written and the operator undertook corrective measures.

**Historical Comparison** In addition to the current year evaluation, historic trends over the last five years were evaluated as to the number and types of impacts, resources impacted, and severity of impacts. Results indicate that off-site impacts in Maryland are generally minor in nature and occur infrequently.

Ninety-two percent of permit sites were found free of off-site impacts for the current evaluation year (Table 1)<sup>12</sup>. Historically, this has held fairly constant over the last five years with an average of ninety-three percent. When impacts do occur, water and land are the most frequently impacted resources (Table 2)<sup>13</sup>. The severity

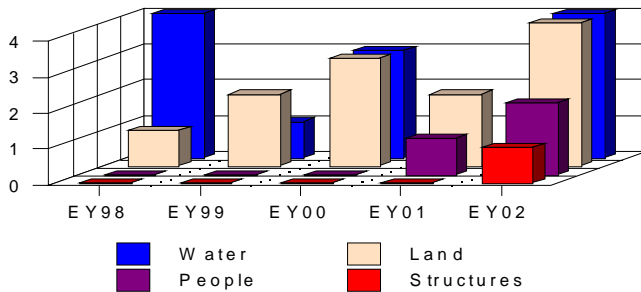
**SITES FREE OF IMPACTS**

Table 1



**IMPACTED RESOURCES**

Table 2



of impacts has been minor in nature with five exceptions over the last five years, all of which were categorized as moderate.

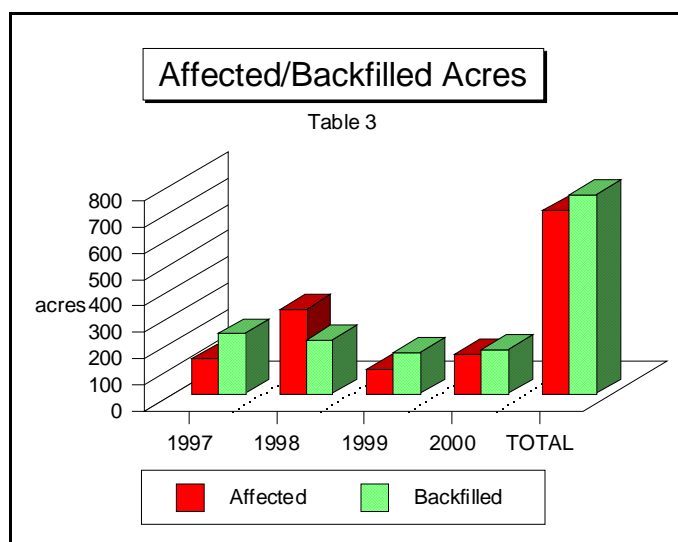
<sup>12</sup>Includes both joint OSM/MDE and MDE-only inspections and does not include forfeiture sites. Fifty-nine of sixty-four sites were free of off-site impacts.

<sup>13</sup>Includes both joint and MDE-only inspections.



## Reclamation Success

OSM conducted a study to evaluate the effectiveness of ensuring successful reclamation on lands affected by surface coal mining operations<sup>14</sup>. 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 ten evaluations met all criteria for AOC and contemporaneous reclamation. As shown in table 3,



the ratio of affected to backfilled acres for the period 1997 through 2000 is 92:100, with backfilled acreage exceeding the affected acreage in three of the four years<sup>15</sup>.

All but one of the evaluation sites met the criteria for land capability and hydrologic reclamation. Overall, during the evaluation year, Maryland's Land Reclamation Committee and BOM jointly approved 176 acres and disapproved 150 acres of phase II reclamation, and BOM approved 137 acres and disapproved 39 acres of phase III reclamation<sup>16</sup>. The higher incidence of failure of phase two approvals may be attributable in part to the drought that has been in effect the last year.

## 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. To meet this requirement, OSM reviewed<sup>17</sup> MDE's applicant violator system (AVS). The objective of this study was to evaluate customer service by reviewing Maryland's AVS determinations for Title V permit applications and Title IV AML contractors. Requirements for use of the AVS are stipulated

<sup>14</sup> Maryland Bond Release Study, Evaluation Year 2002; Available upon request from the Pittsburgh OIO Office.

<sup>15</sup> Source – Maryland Bureau of Mines annual reports, 1997-2000.

<sup>16</sup> This approval constitutes the go-ahead for the permittee to apply for bond release.

<sup>17</sup> Maryland Applicant Violator System Determinations study, Evaluation Year 2002; Available upon request from the Pittsburgh OIO Office.

in OSM/State Memoranda of Understandings (MOU), OSM Directive INE-32, Federal Regulations, and approved State programs. The study revealed that Maryland is not obligated to follow the requirements of an MOU as their original MOU with OSM has expired and Maryland never executed a subsequent MOU such as the model contained in Directive INE-32. Maryland also is not obligated to follow Directive INE-32 as it is subject to holding a valid MOU. Maryland is not obligated to submit a program amendment at this time to comply with OSM regulations pending the outcome of litigation. Finally, Maryland's approved program does not include any direct reference regarding compliance with AVS requirements. Therefore, Maryland's use of the AVS is voluntary.

Despite compliance being voluntary, with limited exceptions, the study found that Maryland follows current requirements included in the OSM Directive, Regulations, and their approved program by using the AVS system for evaluating permit application eligibility determinations, and entering information and updates into the system.

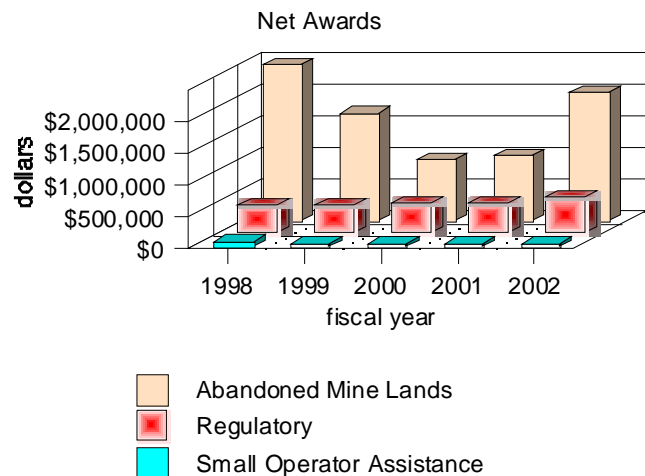
## VI. OSM Assistance

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 \$572,272 in Title V regulatory assistance funding during fiscal year 2002, which was approximately \$86,000 more than awarded the previous year. This is in addition to the \$2,012,011 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 2002, OSM has granted MDE approximately \$37 million net awards. Of this amount, \$.5 million was for the Small Operator Assistance Program, \$8 million dollars for regulatory operations, and \$28.4 million for abandoned mine land reclamation projects. Figure 2 shows comparative grant awards for the three program areas over the last five fiscal years.

Table 4 - Historical Funding Levels



### **Technical Assistance**

OSM provided technical assistance to MDE during the review period through blasting training. An OSM engineer conducted training concerning the new “Blast Log Evaluation Program” (BLEP) at MDE offices. The training was provided to both permitting and compliance personnel for the purpose of more fully evaluating operator’s blast logs. The program is of particular value when blasting results in citizen complaints.

Another form of assistance was given through the AML Federal Emergency program. An emergency was declared by OSM as a result of a mine gas investigation at a church partially built over abandoned mine workings near Frostburg, Maryland. The OSM Division of Federal Reclamation Programs will implement abatement measures.

Another potential emergency was investigated by MDE and OSM personnel from a complaint of structural damage as a result of subsidence. Investigators determined that the

damage was not related to mine subsidence.

Technical assistance was also provided through the use of the OSM borehole camera at the Kempton abandoned mine complex in Garrett County, Maryland. The assistance was provided in support of a proposal to place Coal Combustion Byproduct (CCB) on the mine floor for the purpose of reducing the production of acid mine drainage.

OSM has also assisted MDE by providing periodic financial status tables, loan of a laptop computer, examples of forms and checklists used by other States for making written findings, and the streamlining of regulatory and AML grant program narratives through substitution of existing State reports.

## VII. General Oversight Topic Reviews

In addition to the studies to assess off-site impacts, evaluate the effectiveness in achieving successful reclamation, and review of the AVS system, OSM conducted four additional studies during the evaluation period, per the OSM/MDE evaluation year 2002 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 period<sup>18</sup> to assess the impact of planning, mining, and reclamation activities on the effectiveness of the Maryland Program in achieving the goals of the SMCRA to control adverse environmental impacts during and after mining. Eighteen complete inspections were conducted jointly with MDE Inspectors to evaluate compliance with twenty-one standards involving the Permitting, Mining, and Reclamation phases for achieving the goals of SMCRA. Based on the inspections, Maryland's approved program was found overall to be successful in controlling adverse environmental impacts during and after mining. Drainage control design, construction, and maintenance continue to be the most frequently observed violations. There is a concern that violations are documented more frequently during joint inspections than during State-only inspections. In addition, it was suggested that Maryland explore ways to increase qualified permittee participation in the remaining incentive program.

### ***Alternative Bonding System Analysis***

OSM conducted a study<sup>19</sup> during the evaluation period to evaluate the ability of Maryland's Alternative Bonding System (ABS) to reclaim existing bond forfeiture sites in a timely manner, remain solvent over the long term, and handle catastrophic events.

Based on the results of the study, OSM determined that as of December 1, 2001, Maryland's ABS carried an estimated -\$524,759 deficit for four existing forfeitures in the State. If no more forfeitures occur within the next four years, it is estimated that Maryland should be able to replenish the fund in approximately thirty-three months. If forfeitures continue to occur at the historic rate of 44.4 acres per year, the time to replenish the fund would be estimated at more than seven years.

The following observations were also made:

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<sup>18</sup> Maryland Performance Monitoring study, Evaluation Year 2002. Copies available from the Pittsburgh OIO Office upon request.

<sup>19</sup> Maryland Alternative Bonding System Analysis study, Evaluation Year 2002. Copies available from the Pittsburgh OIO Office upon request.

There is some evidence of a trend toward increasing time delays involved in reclamation of forfeiture sites in Maryland. Although there is no federal timeliness requirement for reclamation of forfeiture sites, it was suggested that Maryland consider measures to reduce time delays of forfeiture reclamation.

The rate of income to the Maryland ABS presently exceeds both the average historical liability rate and the projected future liability rate.

There is a continuing concern regarding ABS solvency under conditions of a catastrophic forfeiture event, defined as one extremely costly forfeiture or several above average forfeitures. One such catastrophic forfeiture has already occurred resulting in \$668,873 under-bonding. Although Maryland does not anticipate a recurrence, if such an event were to happen in the near future it could take more than fifteen years to replenish the fund in an amount sufficient to reclaim the forfeiture site. Maryland should consider adjustments to the funding mechanism of the ABS to address catastrophic events.

### ***Acid Mine Discharge Inventory***

During the evaluation year OSM conducted a study<sup>20</sup> to evaluate Maryland's approved Title V program to assure all necessary authorities are present for adjusting bond on acid mine discharge (AMD) sites, that Maryland is implementing the program properly, and that appropriate adjustments are being made to bond rates as a result of unanticipated AMD. The OIO reviewed Maryland regulations, conducted site reviews of sites eligible for inclusion in the inventory and obtained bond information for these sites, and compared costs to assure sufficient funds were available for treatment.

The study found that all necessary authorities are present for adjusting bond on AMD sites. In addition, Maryland is implementing the program in accordance with approved regulations, policy, and procedures. Finally, with the exception of one site, adjustments have been made to bond rates as needed to account for unanticipated AMD.

### ***Roads***

During the evaluation year, OSM conducted a study<sup>21</sup> to review implementation of Maryland regulations that became effective on February 5, 2001, and related to the design, construction, maintenance, and reclamation of roads used to facilitate surface and deep coal mining operations. File reviews, site visits, and checklists were used to document and evaluate the roads.

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<sup>20</sup> Maryland Acid Mine Discharge Inventory Study; EY2002. Copies available from the Pittsburgh OIO Office upon request.

<sup>21</sup> Maryland Roads; EY2002. Copies available from the Pittsburgh OIO Office upon request.

The study concluded that roads in Maryland are generally in compliance with regulations relating to design, construction, and maintenance, including the regulations that were implemented in February of 2001. Maryland has educated the mining industry on the new requirements through memorandum advisories. The permit application form, however, has not reflected all of the update requirements, and some requirements are not being fully addressed in the application, particularly those relating to certification, classification, and reclamation. In addition, some roads are being used for mining activities for significant periods of time before being certified, “as built”.

## **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, 2001, to September 30, 2002. 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.



**Table 1**

<b>COAL PRODUCTION</b> (Millions of short tons)			
<b>Period</b>	<b>Surface mines</b>	<b>Underground mines</b>	<b>Total</b>
Coal production <sup>A</sup> for entire State:			
Annual Period			
<b>1999</b>	0.801	3.320	<b>4.121</b>
<b>2000</b>	1.404	3.248	<b>4.652</b>
<b>2001</b>	1.402	3.288	<b>4.690</b>
<b>Total</b>	<b>3.607</b>	<b>9.856</b>	<b>13.463</b>

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. **Provide production information for the latest three full calendar years to include the last full calendar year for which data is available.**

**Table 2**

**INSPECTABLE UNITS**

**As of September 30, 2002**

Coal mines and related facilities	Number and status of permits								Insp. Units <sup>D</sup>	Permitted acreage <sup>A</sup> (hundreds of acres)		
	Active or temporarily inactive		Inactive		Abandoned		Totals			IP	PP	Total
	IP	PP	Phase II bond release									
			IP	PP	IP	PP						
<b>STATE AND PRIVATE LANDS REGULATORY AUTHORITY: STATE</b>												
Surface mines	0	46	0	8	0	0	0	54	54	0	51.51	51.51
Underground mines	0	5	0	0	0	0	0	5	5	0	7.93	7.93
Other facilities	0	5	0	0	0	0	0	5	5	0	1.09	1.09
Subtotals	0	56	0	8	0	0	0	64	64	0	60.53	60.53
<b>FEDERAL LANDS REGULATORY AUTHORITY: STATE</b>												
Surface mines							0	0				0
Underground mines							0	0				0
Other facilities							0	0				0
Subtotals	0	0	0	0	0	0	0	0	0	0	0	0
<b>ALL LANDS<sup>B</sup></b>												
Surface mines	0	46	0	8	0	0	0	54	54	0	51.51	51.51
Underground mines	0	5	0	0	0	0	0	5	5	0	7.93	7.93
Other facilities	0	5	0	0	0	0	0	5	5	0	1.09	1.09
Totals	0	56	0	8	0	0	0	64	64	0	60.53	60.53
Average number of permits per inspectable unit (excluding exploration sites)									1			
Average number of acres per inspectable unit (excluding exploration sites)									94.58			
Number of exploration permits on State and private lands:							0	On Federal lands <sup>C</sup> :		0		
Number of exploration notices on State and private lands:							8	On Federal lands <sup>C</sup> :		0		
<b>IP:</b> Initial regulatory program sites <b>PP:</b> Permanent regulatory program sites <sup>A</sup> When a unit is located on more than one type of land, include only the acreage located on the indicated type of land. <sup>B</sup> 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. <sup>C</sup> 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. <sup>D</sup> Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.												

**Table 3**

<b>STATE PERMITTING ACTIVITY</b>												
<b>As of September 30, 2002</b>												
<b>Type of Application</b>	<b>Surface mines</b>			<b>Underground mines</b>			<b>Other facilities</b>			<b>Totals</b>		
	<b>App. Rec.</b>	<b>Issued</b>	<b>Acres</b>	<b>App. Rec.</b>	<b>Issued</b>	<b>Acres<sup>A</sup></b>	<b>App. Rec.</b>	<b>Issued</b>	<b>Acres</b>	<b>App. Rec.</b>	<b>Issued</b>	<b>Acres</b>
New Permits	3	3	153	0	0	0	0	0	0	3	3	153
Renewals	5	6	828	0	0	0	2	3	13	7	9	841
Transfers, sales and assignments of permit rights	0	0		0	0		0	0		0	0	
Small operator assistance	0	0		0	0		0	0		0	0	
Exploration permits	0	0		0	0		0	0		0	0	
Exploration notices <sup>B</sup>		6			2			0			8	
Revisions (exclusive of incidental boundary revisions)		38			4			0			42	
Incidental boundary revisions		9	49		1	0		0	0		10	49
<b>Totals</b>	<b>8</b>	<b>62</b>	<b>1,030</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>13</b>	<b>10</b>	<b>72</b>	<b>1,043</b>

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions. \_\_\_\_\_

<sup>A</sup> Includes only the number of acres of proposed surface disturbance.

<sup>B</sup> State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

**Table 4**

<b>OFF-SITE IMPACTS</b>													
<b>RESOURCES AFFECTED</b>		<b>People</b>			<b>Land</b>			<b>Water</b>			<b>Structures</b>		
<b>DEGREE OF IMPACT</b>		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
<b>TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE</b>	Blasting	1				1							
	Land Stability												
	Hydrology	3	1	1	2				1		1		
	Encroachment	1			1			1					
	Other												
	<b>Total</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
Total number of inspectable units:					<u>64</u>								
Inspectable units free of off-site impacts:					<u>59</u>								
<b>OFF-SITE IMPACTS ON BOND FORFEITURE SITES</b>													
<b>RESOURCES AFFECTED</b>		<b>People</b>			<b>Land</b>			<b>Water</b>			<b>Structures</b>		
<b>DEGREE OF IMPACT</b>		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
<b>TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE</b>	Blasting												
	Land Stability												
	Hydrology	2						2					
	Encroachment												
	Other												
	<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total number of inspectable units:					_____								
Inspectable units free of off-site impacts:					_____								

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

**TABLE 5**

<b>ANNUAL STATE MINING AND RECLAMATION RESULTS</b>		
<b>Bond release phase</b>	<b>Applicable performance standard</b>	<b>Acreage released during this evaluation period</b>
Phase I	- Approximate original contour restored - Topsoil or approved alternative replaced	20.00
Phase II	- Surface stability - Establishment of vegetation	74.00
Phase III	- Post-mining land use/productivity restored - Successful permanent vegetation - Groundwater recharge, quality and quantity Restored - Surface water quality and quantity restored	16.00
	<b>Bonded Acreage Status<sup>A</sup></b>	<b>Acres</b>
Total number of acres bonded at end of last review period (September 30, 2001) <sup>B</sup>		5,943.00
Total number of acres bonded during this evaluation year		6,002.00
Number of acres bonded during this evaluation year that are considered remining, if available		
Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7)		0.00

<sup>A</sup> Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.

<sup>B</sup> Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).

OPTIONAL TABLE(S) 6

(See Instructions)

**Table 7**

<b>STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)</b>		
<b>Bond Forfeiture Reclamation Activity by SRA</b>	<b>Number of Sites</b>	<b>Acres</b>
Sites with bonds forfeited and collected that were unreclaimed as of September 30, 2001 (end of previous evaluation year) <sup>A</sup>	2	161.00
Sites with bonds forfeited and collected during Evaluation Year 2002 (current year)	0	0.00
Sites with bonds forfeited and collected that were re-permitted during Evaluation Year 2002 (current year)	0	0.00
Sites with bonds forfeited and collected that were reclaimed during Evaluation Year 2002 (current year)	0	0.00
Sites with bonds forfeited and collected that were unreclaimed as of September 30, 2002 (end of current year) <sup>A</sup>	2	161.00
Sites with bonds forfeited but uncollected as of September 30, 2002 (end of current year)	1	25.00
<b>Surety/Other Reclamation (In Lieu of Forfeiture)</b>		
Sites being reclaimed by surety/other party as of September 30, 2001 (end of previous evaluation year) <sup>B</sup>	0	0.00
Sites where surety/other party agreed to do reclamation during Evaluation Year 2002 (current year)	0	0.00
Sites being reclaimed by surety/other party that were re-permitted during Evaluation Year 2002 (current year)	0	0.00
Sites with reclamation completed by surety/other party during Evaluation Year 2002 (current year) <sup>C</sup>	0	0.00
Sites being reclaimed by surety/other party as of September 30, 2002 (current evaluation year) <sup>B</sup>	0	0.00
<sup>A</sup> Includes data only for those forfeiture sites not fully reclaimed as of this date <sup>B</sup> Includes all sites where surety or other party has agreed to complete reclamation and site is not fully reclaimed as of this date <sup>C</sup> This number also is reported in Table 5 as Phase III bond release has been granted on these sites		

**TABLE 8**

<b>MARYLAND STAFFING</b> <b>(Full-time equivalents at the end of evaluation year)</b>	
<b>Function</b>	<b>EY 2002</b>
<b>Regulatory Program</b>	
Permit review	3.44
Inspection	4.54
Other (administrative, fiscal, personnel, etc.)	3.40
<b>Regulatory Program Total</b>	<b>11.38</b>
<b>AML Program Total</b>	<b>4.80</b>
<b>TOTAL</b>	<b>16.18</b>



**TABLE 9**

<b>FUNDS GRANTED TO MARYLAND BY OSM (Millions of dollars) EY 2002</b>		
<b>Type of Grant</b>	<b>Federal Funds Awarded</b>	<b>Federal Funding as a Percentage of Total Program Costs</b>
Administration and Enforcement	\$572,272.00	50
Small Operator Assistance	\$35,000.00	100
<b>Totals</b>	<b>\$607,272.00</b>	

## **APPENDIX B**

## ***Maryland Comments***

MDE provided the following comments to the EY2002 Evaluation Report.

December 12, 2002

Mr. George Reiger, Program Manager  
Office of Surface Mining  
Oversight and Inspection Office  
Three Parkway Center  
Pittsburgh, Pennsylvania 15220

Dear Mr. Reiger:

Thank you for the opportunity to provide comments regarding the Maryland 2002 Annual Evaluation Summary Report. I appreciate your comments in highlighting the effectiveness of our program particularly in the areas of public participation where we have been able to leverage dollars far beyond our Title IV grant and at the same time involve the community in a sense of accomplishment. I trust you will convey that success to others at OSM as positions develop in regards to SMCRA reauthorization. I do have several concerns and suggestions regarding the draft Annual Report.

I don't believe the paragraph on page 14 under Regulatory Program Issues which infers that more violations are written by our inspectors when accompanied by an OSM official is appropriate. You go on to question the level of documentation at violation sites. Your staff had previously categorized this as a concern during a quarterly meeting. I don't think this situation rises to the level of inclusion in the annual report and would suggest the omission of paragraph 2 under Regulatory Program Issues on page 14.

On page 15 in the first full paragraph and again on page 25 your concern regarding acres being permitted versus acres being backfilled is noted. I don't agree that the numbers are a direct correlation nor do they indicate a specific problem. I believe a closer look at contemporaneous reclamation would be more indicative of actual conditions rather than the ratio of new acres to backfilled acres. Was this issue addressed in another topical study? I don't recall, but if so I would suggest another sentence at the beginning of the following paragraph on page 15 that

highlights success with contemporaneous reclamation.

The figures in Table 10 are not accurate through no fault of OSM. A recently discussed error in calculations in the Compliance Programs database revealed that not all months were counted. A revised search indicated for the period of October 1, 2001 through September 30, 2002 total inspections were 975. That number consisted of 634 partial and 341 complete inspections.

Thank you for the opportunity to comment on this report. We look forward to a continued working partnership with OSM in the regulation of coal production and the reclamation of lands and water previously impacted by coal mining activities. Please call me at (410) 537-3557 should you have any questions.

Sincerely;

C. Edmon Larrimore, Program Manager  
Mining Program

## ***Disposition of Comments***



## United States Department of the Interior

OFFICE OF SURFACE MINING  
Reclamation and Enforcement  
Oversight and Inspection Office  
4480 Refugee, Rm. 201      Three Parkway Center  
Columbus, Ohio 43232      Pittsburgh, Pennsylvania 15220

DEC 18 2002

Mr. C. Edmon Larrimore  
Administrator, Mining Program  
Maryland Department of the Environment  
1800 Washington Blvd.  
Baltimore, Maryland 21230

Dear Mr. Larrimore:

Thank you for your December 12, 2002, letter on our draft evaluation year 2002 Annual Report. We have made the following changes to the report based on comments contained in your letter and have enclosed a copy of the final report for your records.

Regulatory Program Issues - Your comment suggested that our concern regarding the disparity in documentation of violations is not of sufficient importance to be included in the annual report. OSM appreciates the sensitivity of this issue, has attempted to provide meaningful information based on facts, and to treat these facts in a balanced manner. We feel we have accurately portrayed the Maryland inspection data to assist you in your efforts for continuous program implementation. We did, in the interest of balance, modify the associated topical report to delete any references to statistical validity and magnitude of the difference.

You also expressed a concern on the issue of contemporaneous reclamation. Specifically, you felt that the comparison data we used, permitted vs. backfilled acres, was not a good indicator of contemporaneous reclamation. You suggested that we use statistics more indicative of actual conditions. We agree. To this end, we have modified the table and narrative on page 25 to compare affected vs. backfilled acres. This more meaningful comparison shows that backfilled acreage has actually exceeded affected acreage three of the last four years. This has resulted in the elimination of the OSM concern expressed on page 15. In addition, we have revised the Summary section on page 4 to reflect the results of that analysis.

Appendix A Data Tables - We have revised the inspection figures in Table 10 to reflect the updated information you have supplied.



Mr. C. Edmon Larrimore

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In addition to your comments of December 12, we have revised the report<sup>1</sup> to parallel modifications made to the topical study, Off-Site Impacts.

Your comments and coordination have improved the reports and we appreciate the effort.

Sincerely,

  
George J. Rieger  
Program Manager

Enclosure

cc: Scott Boylan (w/Enclosure)  
John Carey (w/Enclosure)  
Steve Layton (w/Enclosure)

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<sup>1</sup> See Off-Site Impacts section, page 23, and Summary section, page 4